MEDICAL WORLD NEWS

MARCH 3, 1961



WINDOW ON THE INVISIBLE

A New Frontier for Diagnosis

Is the Hippocratic Oath Out of Date?

Melvin L. Dean, M.D.
288 S. Limestone St.
Lexington 1, Ky.

Introducing new therapy for

hypertension and congestive failure

lowers blood pressure
drains excess water
calms apprehension

Now the most widely prescribed diuretic-antihypertensive, hydrochlorothiazide, is combined with the most widely prescribed tranquilizer, meprobamate. It is called "Miluretic", and constitutes new, effective therapy for hypertension and congestive failure — *especially when emotional factors complicate your treatment.*

What does Miluretic do? Both components are of proven value in hypertension. And in congestive failure, Miluretic induces smooth, continuous diuresis. Miluretic's biggest advantage is that it tranquilizes hypertensive and edematous patients safely and quickly.

Avoids side effects of other antihypertensive agents

Antihypertensive agents derived from Rauwolfia often cause reactions such as depression and nasal congestion; Miluretic does not.

Miluretic is a highly effective, safe combination that gives the physician new convenience in the treatment of hypertension and congestive failure.

new **Miluretic***

MILTOWN® + HYDROCHLOROTHIAZIDE

Composition: 200 mg. Miltown (meprobamate, Wallace) + 25 mg. hydrochlorothiazide

Dosage: For hypertension, 1 tablet four times a day. For congestive failure, 2 tablets four times a day.

Supplied: Bottles of 50 white, scored tablets

Available at all pharmacies

For samples and complete literature, write to

WALLACE LABORATORIES / *Cranbury, N. J.*

*Trade-mark

CHV 3583

READ WHY THIS IS TODAY'S MOST ADVANCED SURGICAL ADHESIVE TAPE

Here is a dramatically new and different surgical adhesive tape. We urge you to try it. Quite possibly it is the tape you will wish to use in your practice and recommend to your patients from now on.

Three years under development in the Medical Research Laboratories of 3M Company, now proved in extensive clinical trial,[1] this new tape has physical properties completely different from those of any other existing surgical adhesive. It offers equally unprecedented advantages in use.

PROPERTY: tissue-thin microporous backing and adhesive—the first truly nonocclusive tape. **ADVANTAGE:** prevents maceration and mechanical irritation. Cool, lightweight, comfortable. Easy to tear, handle, apply.

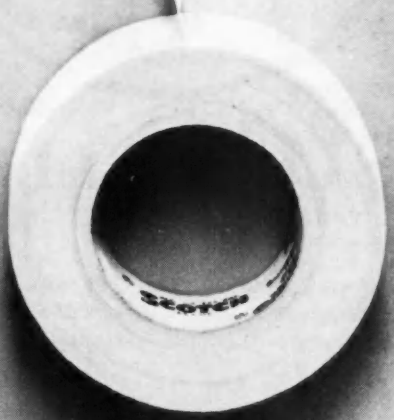
PROPERTY: new, physiologically inert synthetic components—contains no natural rubbers or resins. **ADVANTAGE:** nonirritating, virtually eliminates traditional problems of chemical irritation even in markedly tape-sensitive patients.

PROPERTY: thin, non-creeping copolymer adhesive does not entrap hairs, yet outholds previous tapes. **ADVANTAGE:** easily removed without painful depilation. Sticks even in baths. Requires fewer changes.

Available through your surgical supply dealer or pharmacy in usual widths, ½" to 3", 10 yard rolls. To receive a trial sample, write to 3M Company, St. Paul 6, Minnesota.

MINNESOTA MINING AND MANUFACTURING COMPANY 3M

...WHERE RESEARCH IS THE KEY TO TOMORROW



Reg. U.S. Pat. Off.

Scotch Brand SURGICAL TAPE MICROPOROUS NO. 530

"SCOTCH" is a registered trademark of 3M Co.

1. Golden, T.: Am. J. Surg. 100: 789, 1960.

©3M Co., 1961

when respiratory congestion is complicated by secondary bacterial invaders...



Trisulfaminic®

TRIAMINIC WITH TRIPLE SULFAS

tablets/suspension

Provides Triaminic[1,2,3] for decongestion and to promote drainage of nasal and paranasal passages

Provides triple sulfas to control streptococcal, pneumococcal and staphylococcal invaders[4]

Each Trisulfaminic Tablet and each tsp. (5 ml.) of Trisulfaminic Suspension provides:
Triaminic® 25 mg. and Trisulfapyrimidines, U.S.P. 500 mg.

Dosage: *Adults*—2 to 4 tablets or tsp. initially, followed by 2 every 4 to 6 hours. *Children 8 to 12*—2 tablets or tsp. initially, followed by 1 every 6 hours. *Children under 8*—initially, ½ tsp. per 10 lbs. body weight, to a maximum dose of 2 tsp., then about ⅓ of this dose every 6 hours.

Medication may be continued until patient has been afebrile for 3 days.

1. Lhotka, F. M.: Illinois M. J. *112*:259 (Dec.) 1957. 2. Fabricant, N. D.: E.E.N.T. Monthly *37*:460 (July) 1958. 3. Farmer, D. F.: Clin. Med. *5*:1183 (Sept.) 1958. 4. Sophian, L. H., et al.: The Sulfapyrimidines, New York, Press of A. Colish, 1952, p. 132.

DORSEY LABORATORIES • a division of The Wander Company • Lincoln, Nebraska

VOL. 2, NO. 5

MEDICAL WORLD NEWS

THE NEWSMAGAZINE OF MEDICINE

MARCH 3, 1961

CONTENTS

PAGE

Late News 6

DRUG APPROVAL LAG STIRS CONTROVERSY 16
Industry charges, and FDA denies, that there is a conscious slowdown in letting new medicines go to market.

METABOLIC ERROR SPOTTED IN MONGOLS 18
French biologists track down genetic anomaly and find tryptophan defect may be the cause of brain impairment.

Outlook 15

FRENCH GET INTIMATE VIEW OF LIFE 27
Using a four-story electron microscope, Toulouse scientists take unprecedented picture of living cells.

SMALL WORLD REVEALED BY ELECTRONS 28
In less than a generation this super-microscope has opened a new window for the medical researcher.

ISOZYMES — NEW WORD, NEW CONCEPT 33
Electrophoretic studies of blood pick out typical patterns stamped by diseased tissues.

FEWER SHOTS FOR HAY FEVER PATIENTS 37
Clinical trials show new ragweed preparations give protection with one to six shots.

Legislative News

KENNEDY'S 'VERY MODEST PROPOSAL' 20
The President's first health package to Congress includes health care for the aged tied firmly to Social Security.

Doctor's Business 43

IS THE HIPPOCRATIC OATH OUTDATED? 30
Illinois professor surveys medical school deans and finds that medicine has come a long way from ancient Greece.

MEDICINE'S ARTICULATE SPOKESMAN 34
Miami surgeon Edward R. Annis preaches what he practices: "All educated men owe a responsibility to the Government."

INTERNS' FEES CALLED FIXED 36
AMA official says hospital administrators in many cities are working together to keep wages at a low level.



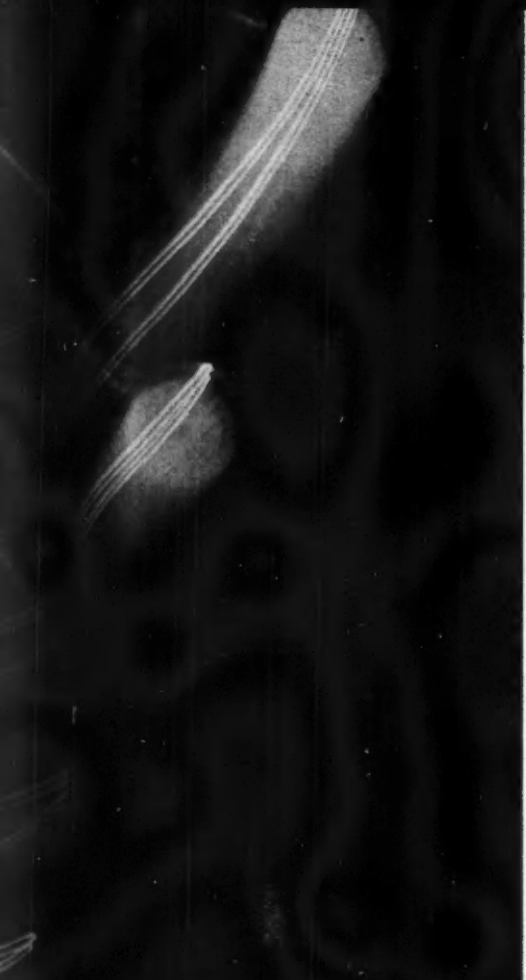
On the cover: The electron microscope has opened new worlds for biology and medicine. Recent developments promise to extend its power even further. Story on p. 27.

Departments

LETTERS TO THE EDITOR 11
PRODUCT NEWS 40
SCISSORS & SCALPEL 40
EDITOR'S CHOICE 46
ADVERTISER INDEX 47
NAMES IN THE NEWS 47
EDITORIAL BY DR. FISHBEIN 48

MEDICAL WORLD NEWS is published bi-weekly by Medical World Publishing Company, Inc., 30 Rockefeller Plaza West, New York 20, N. Y. Accepted as controlled circulation publication at Fairview, New Jersey. Subscription rates: $12.50 per year to non-professionals; $6.00 to non-qualifying physicians or persons in allied professions; $15.00 for foreign subscriptions; single copies, 60 cents.
© 1961 by Medical World Publishing Company, Inc. All rights reserved. Reproduction without specific permission is prohibited.
CHANGE OF ADDRESS: Notification should be sent to Medical World News, 30 Rockefeller Plaza West, New York 20, N. Y. Please give both old and new addresses, including zone numbers, if any. Printed in U.S.A. POSTMASTER: Please send form 3579 to Medical World Publishing Company, Inc., 30 Rockefeller Plaza West, New York 20, N. Y.


limit the
blood pressure
swing



new

Rautrax-N*

Squibb Standardized Whole Root Rauwolfia Serpentina (Raudixin) and Benzydroflumethiazide (*Naturetin) with Potassium Chloride

Rautrax-N lowers high blood pressure gently, gradually...protects against sharp fluctuations in the normal pressure swing. Rautrax-N combines Raudixin, the cornerstone of antihypertensive therapy, with Naturetin, the new, safer diuretic-antihypertensive agent. The complementary action of the components permits a lower dose of each thus reducing the incidence of side effects. The result: Maximum effectiveness, minimal dosage, enhanced safety. Rautrax-N also contains potassium chloride—for added protection against possible potassium depletion during maintenance therapy.

Supply: Rautrax-N— capsule-shaped tablets providing 50 mg. Raudixin, 4 mg. Naturetin, and 400 mg. potassium chloride. Rautrax-N Modified—capsule-shaped tablets providing 50 mg. Raudixin, 2 mg. Naturetin, and 400 mg. potassium chloride. For complete information consult package insert or write Professional Service Dept., Squibb, 745 Fifth Avenue, New York 22, N. Y.

Squibb Quality—The Priceless Ingredient

SQUIBB

RAUDIXIN,® RAUTRAX,® AND NATURETIN® ARE SQUIBB TRADEMARKS.

another tired patient with "nothing organically wrong"?

. . . or another case of hidden hypothyroidism?

Chronic fatigue is often the chief complaint – sometimes the only complaint – of the patient with mild hypothyroidism.* Although diagnostic tests, like the clinical picture, are frequently inconclusive in this type of thyroid deficiency, many of these patients respond dramatically to a therapeutic trial of Proloid.

Proloid – preferred therapy whenever thyroid is indicated–establishes and maintains a euthyroid state safely and smoothly. An exclusive double assay assures unvarying metabolic potency from tablet to tablet, from prescription to prescription, year after year.

Full dosage information, available on request, should be consulted before initiating therapy.

*Starr, P.: M. Clin. North America *43*:1071 (July) 1959.

THYROID
PROLOID
predictable, safe, economical
WARNER CHILCOTT
MORRIS PLAINS, N.J.
makers of Tedral Gelusil Peritrate Mandelamine

GP 11



LATEN

MAKE IRON-DEXTRAN COMPLEX AVAILABLE, SAYS AMA

Iron-dextran complex (*Imferon*, Lakeside) should again be made available to the physician for use in iron deficiency anemia where oral administration is unsatisfactory or impossible, the American Medical Association Council on Drugs recommends.

The parenteral drug was removed from the market on the basis of a Food and Drug Administration finding that it was labeled in such a way as to promote its use "in situations that do not justify parenteral administration of iron because of possible risks." The manufacturer of *Imferon*, however, has been invited to prepare appropriate labels so that FDA can reconsider putting the drug back on the market.

Says the AMA council: The evidence of possible risk consists of one report of a questionable sarcoma. Furthermore, the withdrawal of *Imferon* "deprives the physician of a useful drug, since, in some situations, parenteral administration of iron is preferable to oral administration . . . the use of iron-dextran complex does not appear to be attended by any greater hazard than do the administration of the injectable forms of iron and the transfusions which physicians are now obliged to use as a substitute."

SUCTION CUTS INFECTIONS IN ORTHOPEDIC SURGERY

The use of suction to drain surgical wounds is a new technique in major orthopedic surgery which reduces both the incidence and variety of postoperative wound complications.

So report Drs. Theodore R. Waugh and Frank E. Stinchfield (*Names in the News*, p. 47) of Columbia-Presbyterian Hospital, New York. Instead of letting the surgical wound drain itself, they now insert siliconized rubber tubes, ¼ inch in diameter, deep into the wound and attach the tubing to a source of suction. Drainage is maintained for at least 24 hours, but not more than 72, they told the annual meeting of the American Academy of Orthopaedic Surgeons in Miami Beach.

Their follow-up study of 100 patients, operated on for hip fractures, spinal fusions and other major conditions, reveals no postoperative occurrence of stitch abscesses, thrombo-

phlebitis, hematomas or wound disruptions. The technique also lowers the height of postoperative fever from the usual 102-103° F to 100-100.6°, and reduces the incidence of wound infection from three to one per cent.

HEART DEFECTS OF SIBLINGS ARE CLOSELY RELATED

Siblings who have congenital heart defects are apt to have them in the same place.

The study on which this finding was based was conducted by Dr. Russell M. Nelson, surgeon, and Fred Christenson, sophomore medical student, at the University of Utah. Mr. Christenson began his search for study material in the Mormon "Doomsday Books," in which births, illnesses, deaths and their causes are noted in complete detail for several generations. He turned up 1,100 suspects—brothers and sisters in families with one proven case of congenital heart disease. All were subsequently catheterized.

Twelve pairs of siblings were found to have valvular or septal defects. Of these, nine pairs had defects in exactly the same place. In the other three pairs, the defects were anatomically very close.

NEW-TYPE ETHYL CHLORIDE SPRAYS AWAY PAIN

In 1948, when Sen. John F. Kennedy took his ruptured disk to Dr. Janet Travell, now personal physician to President Kennedy, she employed an ethyl chloride spray as a local painkiller.

A British surgeon now declares that ethyl chloride should be "the first line of attack" in a host of painful conditions. His suggestion, published in the *British Medical Journal,* is based on nine years' experience with several-hundred cases of lumbago, renal colic, wryneck, dysmenorrhea, fibrositis and fractured ribs. He also has helped develop a compound that is therapeutically similar to ethyl chloride for the do-it-yourself patient.

In cases of low back pain, the results of spraying are dramatically obvious, says Dr. Maurice Ellis of the General Infirmary, Leeds. Not only does the pain disappear but the physician can actually watch the normal lumbar curve return. Patients with dysmenorrhea severe enough to require hospitalization get up and walk out of the hospital ten minutes after spraying, he declares.

In renal colic, "which large doses of morphine, pethidine hydrochloride or atropine rarely affect immediately," the chloride spray works in minutes. And, "in a large number of cases, surgical intervention is now unnecessary." Equally spectacular are the results in patients with a sudden "crick" in the neck, fibrositis, painful scars and causalgia, he reports.

Contrasting the effects of his treatment with ordinary analgesics, from aspirin to morphine, Dr. Ellis claims they only dull the pain whereas the spray abolishes it. He agrees with Dr. Travell that freezing "plays no part whatever in the mechanism of relief." In fact, actual freezing of tissues is detrimental. He believes the permanent analgesic action of the spray depends on its breaking the vicious circle whereby muscle spasm produces pain which produces continued muscle spasm.

The spray, he suggests, swamps the pain impulses "by bombarding the central pain receptor areas with a barrage of cold impulses." With the sensation of pain short-circuited, the motor impulses causing muscle spasm also stop.

For instance, in prolapsed-disk

CONTINUED ON PAGE 8

PROGNOSIS OF PATIENTS WITH MALIGNANT DISEASE IS REVEALED IN NEW STUDY

Latest figures on deaths from malignant disease underscore the importance of primary site, sex and stage of the disease at diagnosis.

A report prepared by the Metropolitan Life Insurance Company shows that with one exception—basal cell cancer of the skin—the rates for localized lesions are much lower than other stages.

Women generally show higher survival rates than men. But in some cancer sites—notably the digestive organs and peritoneum—the rates for women have not declined as much as for men. Both groups have shown "impressive reductions" in the rate for stomach cancer.

Mortality rates from cancer of the intestine remain just about the same among women, while decreasing slightly among men. Finally, deaths from lung cancer, leukemia and lymphosarcoma have risen slightly among females and sharply among men.

FIVE YEAR SURVIVALS IN CANCER

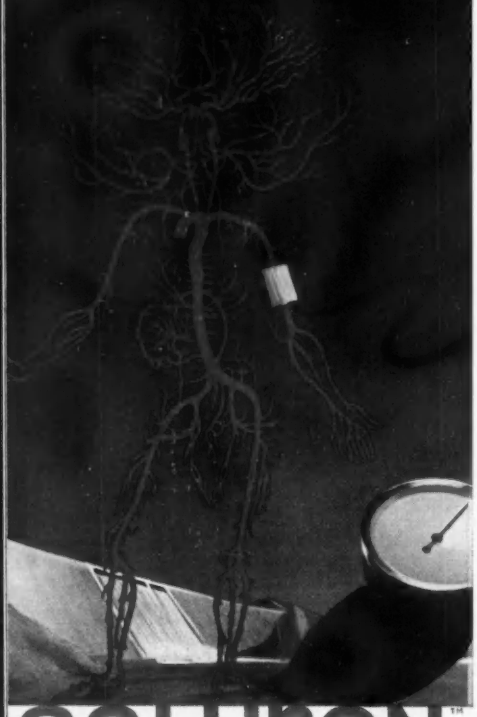
PRIMARY SITE (diagnosed since 1950)	ALL STAGES male	ALL STAGES female	LOCALIZED male	LOCALIZED female
Tongue	24	34	41	*
Esophagus	2	5	24	*
Stomach	8	9	30	31
Large intestine	29	35	51	61
Rectum	28	34	51	57
Lung, bronchus	4	8	*	*
Breast	*	50	*	72
Uterine cervix		53		74
Uterine corpus		65		77
Ovary		24		60
Prostate	24		34	
Skin, basal cell	71	80	72	81
Thyroid gland	52	74	*	87
Lymphosarcoma	20	25		
Hodgkin's disease	24	35		
Leukemia, chronic lymphatic	18	27		
Leukemia, acute lymphatic	7	6		

*Figures too small or not available

CANCER DEATHS BY SITE

SITE	MALES 1949	MALES 1958	FEMALES 1949	FEMALES 1958
MALIGNANT NEOPLASMS (Total)	Deaths per 100,000 persons			
	145.7	161.8	140.2	139.5
	Per cent distribution			
Buccal cavity & pharynx	3.9	3.9	1.0	1.1
Digestive organs & peritoneum	43.1	35.8	36.8	34.1
Esophagus	2.8	2.5	0.8	0.8
Stomach	14.6	9.3	8.9	6.5
Intestines	10.3	9.7	12.6	12.9
Rectum	5.7	4.7	4.5	4.0
Biliary passages & liver	4.2	3.1	5.6	4.5
Pancreas	4.9	5.5	3.6	4.4
Respiratory system	15.4	22.6	3.7	4.5
lung & bronchus	13.1	20.7	3.1	4.0
Breast	0.2	0.2	18.3	19.1
Prostate	10.4	10.1		
Uterus			14.4	11.3
Ovary			5.6	6.5
Urinary organs	6.3	6.1	3.4	3.4
bladder	4.2	3.9	2.0	1.9
Leukemia	4.6	5.3	3.4	4.3
Lymphosarcoma	4.2	5.2	2.9	4.3
Hodgkin's disease	1.5	1.4	1.0	1.0

Sustained-action SALURETIC *with antihypertensive effects...*



saluron™

sustained-action hydroflumethiazide 'Bristol'

- Prompt sodium excretion, with a duration of at least 18 hours on a single 50-mg. tablet.
- Less potassium and bicarbonate excretion or pH change than with chlorothiazide or hydrochlorothiazide.
- A superior foundation drug for an antihypertensive regimen... often the only drug required.

Dosage: Usually 1 tablet daily. Full information in Official Package Circular.

Supply: Scored 50-mg. tablets, bottles of 50.

BRISTOL LABORATORIES
Syracuse, N. Y. • Division of Bristol-Myers Co.

lumbago, muscle relaxation permits retraction of the prolapsed nucleus; the resulting cessation of pressure on the adjacent nerves ends the pain. In renal colic, which the British surgeon says is generally caused by a stone, "the ureter muscle relaxes and the stone moves down a little." In dysmenorrhea, spraying the hypogastrium relaxes the uterus so that clots causing the irritation can move away.

MENINGEAL HERNIAS OF NEWBORN HIDE CORRECTABLE DEFECTS

Most babies born with meningocele need not grow up with neurological and urological problems, according to Dr. C. Everett Koop, surgeon-in-chief, Children's Hospital, Philadelphia.

When a pediatric surgeon repairs the meningocele, (a congenital hernia of the meninges that protrudes through the vertebrae) he should also perform a laminectomy. By doing so he "can see unsuspected but correctable displacements of the spinal cord and its major nerves," Dr. Koop told a meeting of the American College of Surgeons in Birmingham, Ala.

As a result of bringing the cord and nerves to their proper position "we now have 65 per cent of our children walking," he reports. Although his hospital treats only about two children with meningocele each year, "over 2,000 who are untreated survive the newborn period annually and are added to the population as neurological and urological cripples," says Dr. Koop.

As with all congenital defects that are repairable, he emphasizes that treatment should begin before the infant is 48 hours old.

ATHEROSCLEROSIS MAY BE 300,000,000 YEARS OLD

Susceptibility to atherosclerosis may be the result of a mutation that occurred in the Paleozoic Era some 300,000,000 years ago, long before mammals even existed.

The original mutation might have struck reptilians, the common ancestors of birds and mammals, according to Dr. Albert I. Lansing, professor of anatomy at the University of Pittsburgh School of Medicine. It was not eliminated by natural selection because the disease expresses itself rather late, when the reproductive life of the animal has come to an end.

Atherosclerosis was first recorded with frequency as far back as 1,500 B.C., Dr. Lansing told a symposium commemorating the 150th anniversary of Massachusetts General Hospital in Boston.

Lesions are common in mammals, carnivorous and herbivorous, in and out of captivity; in some birds, as in chickens, it is indistinguishable from human atherosclerosis.

The disease, however, apparently strikes neither fishes nor amphibians. Nor has it been found among those reptilians that have been examined for the disease.

Thus, Dr. Lansing says he believes that in this common ancestor of birds and mammals, one should look for the appearance of a change in the structure, chemistry as well as physiology of the circulatory system. Analysis of arteries before and after the phylogenic appearance of atherosclerosis may give valuable clues to the understanding and ultimate control of atherosclerosis in man.

ATHLETIC NONSMOKERS HAVE GREATER VITAL CAPACITY

Tests on "frogmen" and other less athletic Navy personnel suggest that physical conditioning improves the mechanism of the chest-diaphragm bellows system, while smoking produces slight airway obstruction.

Twenty-five "superbly conditioned," non-smoking members of an underwater demolition team outscored 11 non-athletic, non-smoking hospital corpsmen and 31 ordinary seamen who had been smoking for about ten years.

The non-smoking, non-athletic group, in turn, outscored the smokers.

The difference appeared largely in timed vital capacity, according to Dr. William Shapiro of the Medical College of Virginia. There was no appreciable difference in maximum breathing capacity, he told the Southern Society for Clinical Research meeting in New Orleans.

The frogmen, Dr. Shapiro noted, were "carefully screened volunteers who had been subjected to 32 weeks of almost unbelievably rigorous physical training designed to build endurance to the utmost, and who maintained peak condition by means of specific athletic programs."



SALUTENSIN™

Hydroflumethiazide • Reserpine • Protoveratrine A

An integrated multi-therapeutic antihypertensive, that combines in balanced proportions three clinically proven antihypertensives.

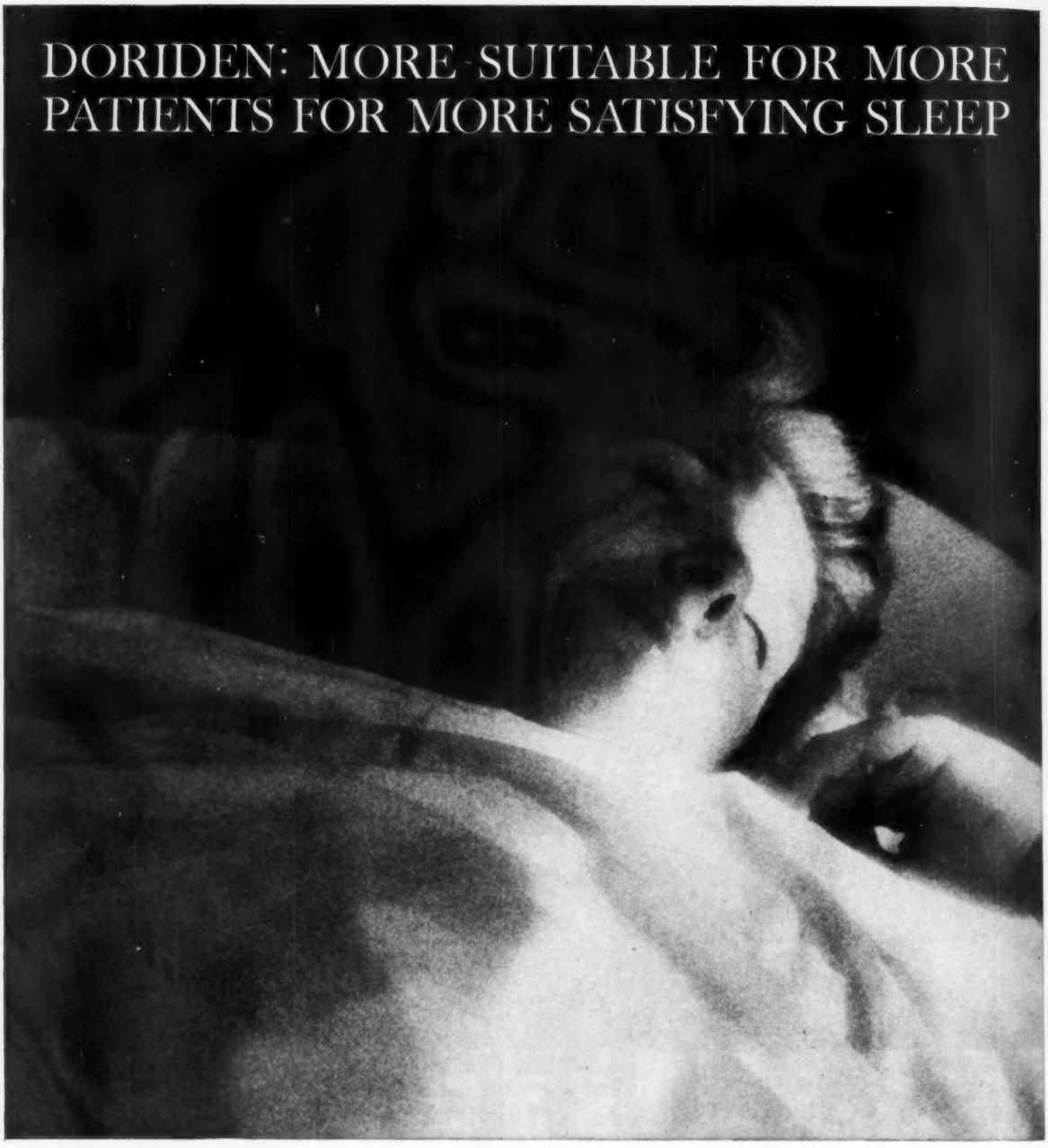
In each SALUTENSIN Tablet:

***Saluron*®** (hydroflumethiazide)—a saluretic-antihypertensive	50 mg.
Reserpine—a tranquilizing drug with peripheral vasorelaxant effects	0.125 mg.
Protoveratrine A—a centrally mediated vasorelaxant	0.2 mg.

Comprehensive information on dosage and precautions in official package circular or available on request.

BRISTOL LABORATORIES • Syracuse, New York

DORIDEN: MORE SUITABLE FOR MORE PATIENTS FOR MORE SATISFYING SLEEP



Doriden offers sound, restful sleep for patients who are sensitive to barbiturat elderly patients, patients with low vital capacity and poor respiratory reserve, and those who are unable to use barbiturates because of hepatic or renal disease. Onset of sleep with Doriden is smooth and gradual, usually with no preliminary excitation. Doriden acts within 30 minutes, and sleep lasts for 4 to 8 hours. Except in rare cases, no "hangover" or "fog," because Doriden is rapidly metabolized. *Complete information sent on request.*

SUPPLIED: *Tablets,* 0.5 Gm., 0.25 Gm. and 0.125 Gm.

/2850MK

DORIDEN®
(glutethimide CIBA)

CIBA SUMMIT, NEW JERSEY

MEDICAL WORLD NEWS

EDITOR
Morris Fishbein, M.D.

EDITORIAL ADVISORY BOARD
Harold S. Diehl, M.D.
Frank L. Horsfall, Jr., M.D.
Chester S. Keefer, M.D.
Howard A. Rusk, M.D.
Theodore R. Van Dellen, M.D.

EXECUTIVE EDITOR
William H. White

ARTICLES: Mae Rudolph

ASSOCIATE EDITORS: Robert Claiborne, Alexander Dorozynski, Herbert Kirshenbaum, Charles Marwick, Jean Watson, George Willard.

COPY DESK: Edwin K. Zittell, *Chief;* Joan Hughes.

CONTRIBUTING EDITORS: Ritchie Calder, Wallace Croatman, Leonard Engel, John Foster, Jacqueline Seaver.

CORRESPONDENTS: *Ann Arbor,* William Bender, Jr.; *Atlanta,* Edwina Davis; *Boston,* Jane McCammon; *Buffalo,* Mildred Spencer; *Chicago,* Theodore Berland; *Detroit,* Jean Pearson; *Ft. Worth,* Blair Justice; *Los Angeles,* Willard Wilks; *Milwaukee,* James C. Spaulding; *New Orleans,* John Wilds; *Oklahoma City,* Imogene Patrick; *Omaha,* Marcia Mickelsen; *Pittsburgh,* Albert Bloom; *Philadelphia,* Pierre Fraley; *San Francisco,* George Dusheck; *St. Louis,* Patricia Page; *Seattle,* Hill Williams; *Toledo,* Ray Bruner; *Mexico City,* Emil Zubryn; *London,* Neil Herzog; *Paris,* Robert Clarke; *Glasgow,* Archibald Jarvie; *Moscow,* Anatoly S. Raben, M.D.; *Copenhagen,* Fradley H. Garner; *Rome,* John Carter; *Stockholm,* Per Bergstrom; *Toronto,* David Spurgeon; *Tokyo,* Norman Sklarewitz.

EDITORIAL RESEARCH: Benita Steinweg.

EDITORIAL ASSISTANTS: Linda Lang, Carole Pomerantz, Loretta Ponzini, Dorothy Quaranta.

ART DIRECTOR
Christopher Magalos

PRODUCTION
William J. Marsik

ASST. TO EXECUTIVE EDITOR
Reba Berlin

SALES DIRECTOR
William J. Egan, Jr.

EASTERN REPRESENTATIVE
Peter H. Lewis

BUSINESS MANAGER
Anthony P. Battiato

PUBLISHER
Maxwell M. Geffen

Letters to the Editor

Belles Lettres

It has been a great pleasure to read your new magazine. A special delight to me, however, was your editorial (MWN, Jan. 6) entitled "The Changing Image of the U.S. Physician." Nowhere have I read as clear and concise a description of the changes that have taken place and the way we, as doctors, have to face them.

KURT T. SHERY, M.D.
Torrance, Calif.

As a research scientist, I am enormously impressed with the high quality and penetrating insight of the articles presented in MEDICAL WORLD NEWS.

The article "Tranquilizers and the Brain" (June 17, 1960) has particularly fine illustrations which I would appreciate permission to reproduce on a slide for teaching purposes.

LT. COL. DAVID G. SIMONS, USAF MC
School of Aviation Medicine
Brooks Air Force Base, Tex.

Ophthalmodynometer

In a previous issue of your journal (MWN, Dec. 2, 1960, p. 25) there appeared a news report concerning a new commercially available ophthalmodynometer. Unfortunately, I have misplaced the clipping and am most interested in writing to the manufacturers of this product. I wonder if you can supply me with their name and address.

FRANCIS S. CALIVA, M.D.
State University of New York
Syracuse, N. Y.

[*The "Ophthalmic Artery Pulsensor" is marketed by the Decker Corp., Bala-Cynwyd, Pa.*—ED.]

Dermatologists View X-ray

I wish to compliment your staff who prepared the excellent article (MWN, Feb. 3, "Changing Patterns of U.S. X-ray Practice") concerning my survey of dermatology office practice. This is by far the best presented story about the survey which has been done. I am especially grateful for the very effective art work. This greatly facilitates the visual impact and it makes me wish very much that we had similar methods available in our specialty journals.

DAVID GOE WELTON, M.D.
Charlotte, N. C.

Dr. Welton deserves to be credited for the very excellent work, but I think there are many possibly misleading conclusions. It is stated that 23.1 per cent of all skin conditions have x-ray used in their treatment. This can be interpreted in many ways and I certainly would not like to feel that 23 out of every 100 patients that come into a dermatologist's office receive x-ray therapy.

Perhaps I am disturbed by this report because I do not feel that the average well-trained dermatologist uses x-ray therapy for as many benign conditions as Dr. Welton's survey would seem to indicate.

J. RICHARD ALLISON, JR., M.D.
Columbia, S. C.

[*Dr. Welton did not mean that each of the participants used ionizing radiation in 23 per cent of all his patient-visits. This percentage was obtained by dividing the total number of ionizing radiation treatments given (by* all *the participants) by the total number of diagnoses recorded in the study*—ED.]

Malpractice

Many months ago I saw a brief notation reviewing a decision in a malpractice lawsuit; I believe it was printed in *Doctors' Business.*

This review cited the judge's opinion that a physician could not be held liable every time a patient did not respond in an expected fashion to a particular form of management and was not liable unless definite negligence or gross misjudgement had occured.

I have since tried to find this brief review, but have so far been unable to do so.

J. J. BAEHR, JR., M.D.
Pensacola, Fla.

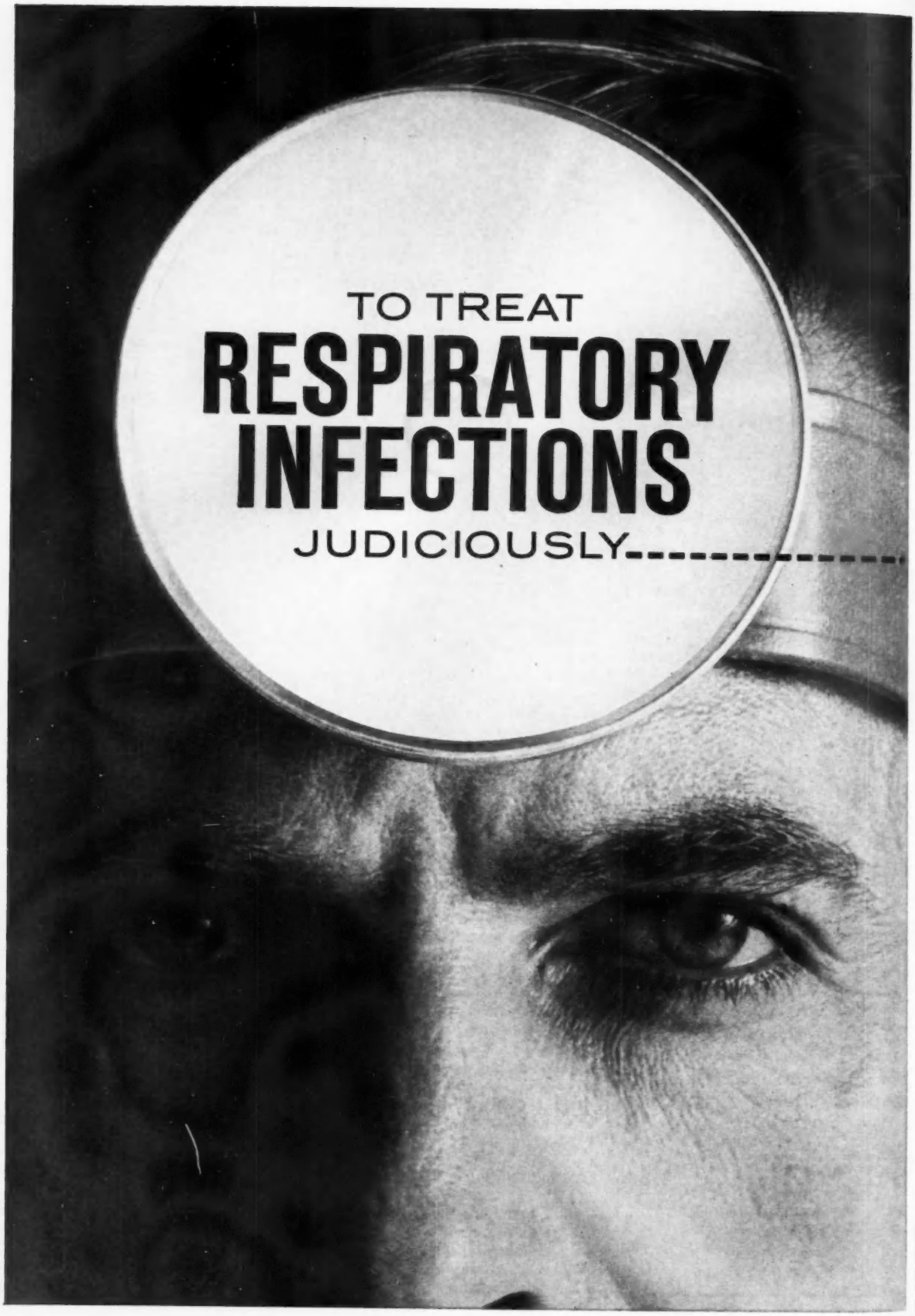
[*The article appeared in the May 6, 1960 issue, in* Doctors' Business. *The Minnesota State Supreme Court ruled that "a physician is not an insurer of a cure or a good result."*—ED.]

Grave Comments

Every thing so far has been investigated from the "Cradle to the Grave" except the grave. How about the undertakers who often have a legal right to levy on the small insurance of the family, and who overcharge exhorbitantly for their services and caskets. They get away with it because of the family's emotional paralysis in the face of death.

Many a child gets less food, less clothes and less education because of the excessive cost of the funeral of its parent.

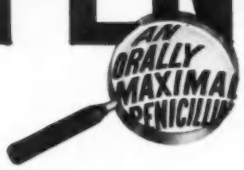
ABRAM WEISS, M.D.
Teaneck, N. J.


TO TREAT
RESPIRATORY
INFECTIONS
JUDICIOUSLY

When it's penicillin-susceptible
and the patient is not allergic
Use an orally maximal penicillin

MAXIPEN®

potassium phenethicillin



Consistent dependable therapeutic response through maximal absorption, maximal serum concentration and longer duration of inhibitory antibiotic levels for less susceptible organisms.

Available as Maxipen Tablets, 125 mg. and 250 mg.; Maxipen for Oral Solution, 125 mg. per 5 cc. of reconstituted liquid.

Literature on request

or

When you hesitate to use penicillin
(eg. possible bacterial resistance or allergic patient)

You can count on

TAO®

triacetyloleandomycin

Extends the Gram-positive spectrum of usefulness to include many staphylococci resistant to one or more of the commonly used antibiotics...*narrows* the spectrum of side effects by avoiding many allergic reactions and changes in intestinal bacterial balance.

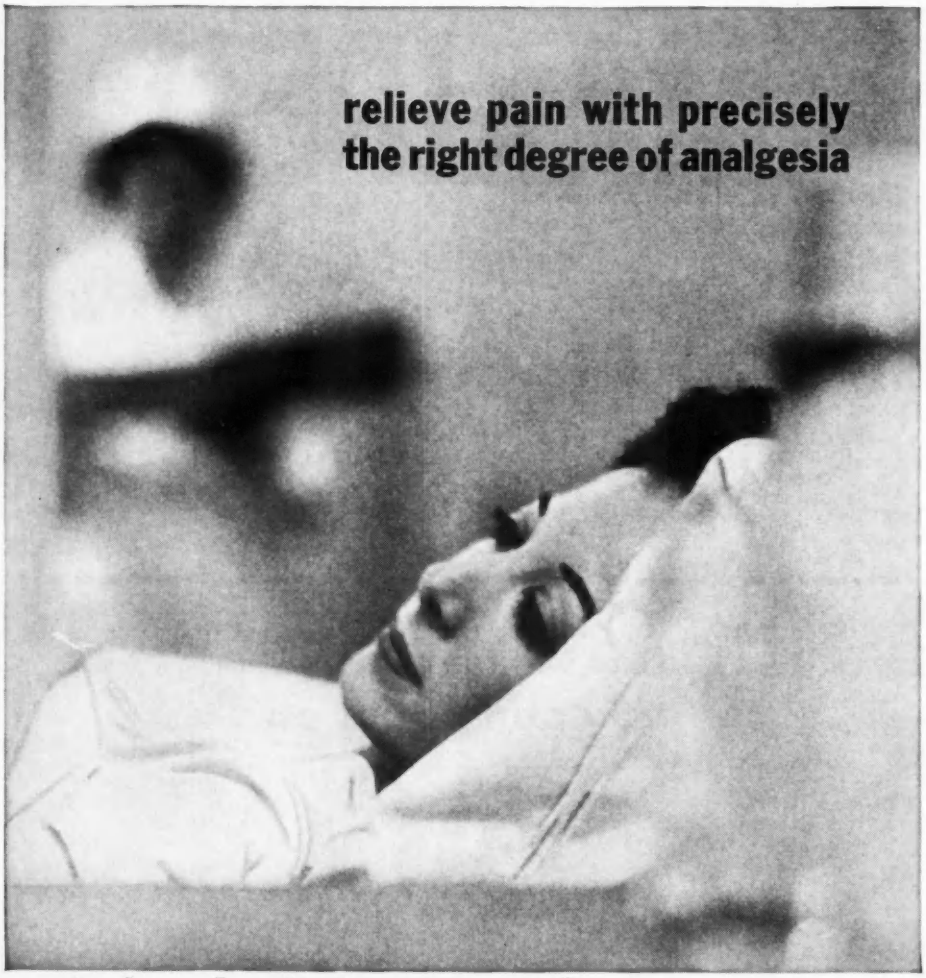
Available as Tao Capsules, 250 and 125 mg.; Tao Oral Suspension, 125 mg. per 5 cc; Tao Pediatric Drops, 100 mg. per cc. of reconstituted liquid; Intramuscular or Intravenous as oleandomycin phosphate. Other Tao formulations also available: Tao®-AC (Tao, analgesic, antihistaminic compound) Tablets; Taomid® (Tao with Triple Sulfas) Tablets, Oral Suspension.

Literature on request

and for nutritional support **VITERRA®** vitamins and minerals
Formulated from Pfizer's line of fine pharmaceutical products



New York 17, N. Y., Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being™



control moderate to severe pain 'Empirin' Compound and 'Empirin' Compound with Codeine Phosphate products provide pinpoint control, anywhere along the pain scale, for all intensities up to that which requires morphine—**without narcotic excess.** For effective analgesic, antipyretic and antitussive action, prescribe the 'Empirin' Compound that suits your purpose best.

'Tabloid' 'EMPIRIN' COMPOUND®

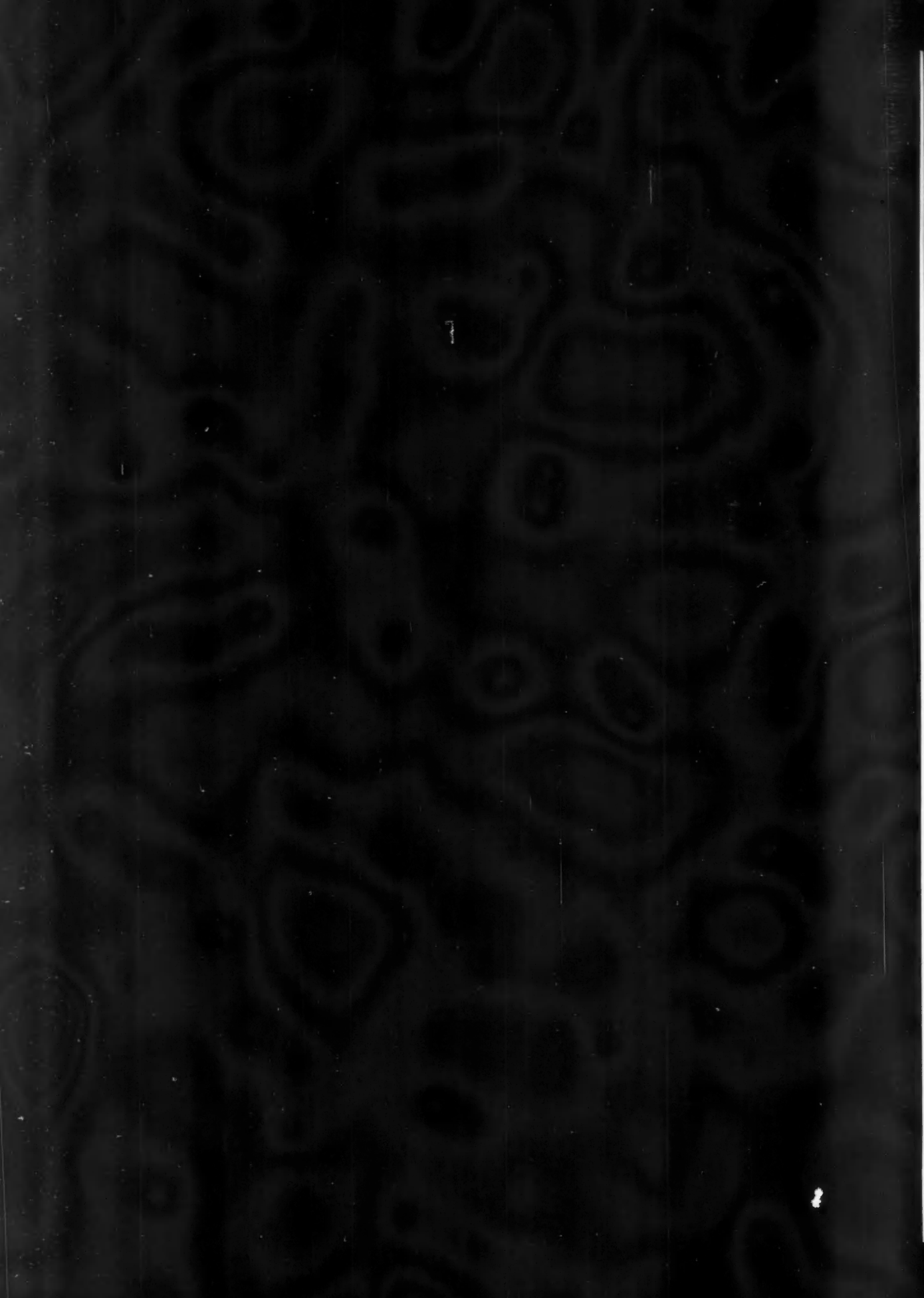
Acetophenetidin	gr. 2½
Acetylsalicylic Acid	gr. 3½
Caffeine	gr. ½

'Tabloid' 'EMPIRIN' COMPOUND® with CODEINE PHOSPHATE*

No. 1 — Codeine Phosphate	gr. ⅛
No. 2 — Codeine Phosphate	gr. ¼
No. 3 — Codeine Phosphate	gr. ½
No. 4 — Codeine Phosphate	gr. 1

*Subject to Federal Narcotic Regulations.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York



OUTLOOK

- Sen. Kefauver continues three-prong probe
- AMA schedules series of medicolegal sessions

Kefauver's drug industry investigations will continue on three fronts in 1961. First, the Senator will ask representatives of the AMA "and other organizations of physicians" to give their views when his subcommittee is ready to draft further industry regulations. Later, he will look into the "vicious counterfeit drug situation" and then probably investigate drug industry finances, including patents and licensing.

A new movie about doctors will be clinically accurate, regardless of its fate at the box office. The producers of "The Young Doctors" were careful to get script approval from the AMA before shooting began. And they've secured the cooperation of Dr. Charles Bigg, head pathologist at New York's St. Luke's Hospital. Dr. Bigg is on the set every day to advise "Dr." Fredric March and "Dr." Ben Gazzara on medical details of their characterizations.

Undergraduates will be working alongside scientists in more than 250 colleges and universities next summer as a result of grants from the National Science Foundation. Through its Undergraduate Research Participation program, the Foundation is making available $3.2 million in 357 grants. About 26 per cent of the students will be working in the biological sciences.

Hypnosis as a medical technique will come under strict control in New York State if a bill now before the state legislature gets a final OK. The sponsor of the measure says it will allow only physicians and dentists to use hypnotherapy.

Does the weather seriously affect human health and behavior? A team from Albert Einstein College of Medicine is going to try to find out. Headed by Dr. Leonard Greenburg of the department of preventive medicine, meteorologists, bio-statisticians and epidemiologists will launch a ten-year study aimed at correlating behavior and health to atmospheric conditions.

The AMA will think twice before cooperating with TV newscasters in the future, if its recent experience with CBS is any criterion. No sooner had the network's hour-long documentary "The Business of Health" left the air than the AMA's Board of Trustees fired off a blistering protest to CBS president Frank Stanton. Said the Board: The show was filled with "misrepresentation, bias and distortion from beginning to end. The real truth of the AMA's position lies somewhere on the CBS cutting room floor." CBS' reaction: "res ipsa loquitur"—the thing speaks for itself.

A handbook on emergency room equipment will soon be published by the American College of Surgeons. Many years in preparation by the College's Committee on Trauma, the handbook will describe the equipment believed most suitable for hospitals and clinics throughout the country.

The law department of the AMA is preparing the newest series of medicolegal meetings. The 1961 symposia will be held March 10-11 in San Francisco, April 14-15 in Louisville and April 28-29 in New York City.

Merck Sharp & Dohme plans to cut the cost of prescription drugs for welfare patients in the 43 states that have vendor payment plans. The company will pay a state ten per cent of the amount paid to retail pharmacists for welfare-patient prescriptions of Merck Sharp & Dohme products. E. R. Squibb & Sons has announced a similar plan; other drug firms are expected to follow suit.

MEETINGS

Mar.	12-17	American College of Allergists, Dallas
Mar.	13-16	National Health Council, National Health Forum, New York City
Mar.	18-22	American Cancer Society, Science Writers' Seminar, St. Petersburg, Florida
Mar.	19-22	Missouri State Medical Assoc., Kansas City
Mar.	20-22	Dallas Southern Clinical Society, Dallas
Mar.	20-24	American Surgical Assoc., Boca Raton, Fla.
Mar.	23-25	American Orthopsychiatric Assoc., N. Y. C.
Mar.	28-31	American Association of Anatomists, Chicago
April	9-12	Tennessee State Medical Association, Chattanooga
April	9-13	Int'l Anesthesia Research Society, Houston

UPCOMING

May	7-11	Int'l College of Surgeons, North American Federation, Chicago
June	4-10	3rd World Congress of Psychiatry, Montreal
Sept.	14-17	2nd Int'l Symposium on Chemotherapy, Naples, Italy
Oct.	4-6	Society for Clinical and Experimental Hypnosis, Cleveland

MEDICAL WORLD NEWS

March 3, 1961 Vol. 2, No. 5

DRUG APPROVAL LAG STIRS A CONTROVERSY

Industry charges, and FDA denies, that Kefauver has made the agency overcautious about letting new medicines go to market

One of the controversies currently brewing in Washington is whether the Food and Drug Administration is dragging its feets on the release of "new and life saving drugs" for the medical profession.

Some pharmaceutical industry leaders say it is, because of supercaution induced by the Kefauver hearings on drug prices. FDA officials take a different view—and the facts seem to lie somewhere in between.

It is certainly true that there has been a decline in recent years in the number of new drugs released by FDA. In 1960, for example, the agency approved only 165 original new drug applications, compared to 231 the previous year and 208 in 1958.

But during this same period drug companies were submitting fewer applications. The 321 applications received by FDA in 1960 fell somewhat short of the 375 submitted in 1959 or the 353 in 1958. Thus, if the Kefauver investigation has been having a dampening effect, it apparently has applied to the filing as well as processing of applications.

Francis Boyer, chairman of Smith Kline & French Laboratories, is one of the first industry leaders to speak out publicly on the problem. In a speech before the Pennsylvania Bar Association, Boyer delivered a slashing attack on the Kefauver hearings.

'Brand New Atmosphere'

Among other things, he said: "The hearings have created a brand new atmosphere in the FDA which seems likely to delay the introduction of new and life saving drugs.

"The FDA officials, men of high integrity and high professional competence," he explained, "have been three times investigated in the last year, and are now understandably loath to stick their necks out by affirmative action. Recent figures indicate that during the third quarter of 1960, only five products containing completely new chemical entities were introduced, compared with 17 for the third quarter of 1959. This is, of course, not conclusive, but is certainly a straw in the wind."

Boyer also cited the view of Dr. Irwin C. Winter, formerly associate professor of pharmacology at the University of Oklahoma and now director of clinical medicine, G. D. Searle & Co. Dr. Winter said: "A new day is dawning, and any idea that the public might be served by prompt handling of a new drug application is out the window."

Another industry official, intimately acquainted with FDA and its problems, conceded that many factors, such as the increasing complexity of new drugs, have a bearing on the drop in new drug releases. But he insisted one of the most important reasons is that the Kefauver hearings have touched off a series of investigations of the FDA, which has been headed



GEORGE P. LARRICK



FRANCIS BOYER



DR. IRWIN C. WINTER



DR. RALPH G. SMITH

since 1954 by Commissioner George P. Larrick.

"These have created a very bad morale," he told MEDICAL WORLD NEWS. "Now, these FDA officials don't want to make any decisions unless they have more data than they need. They want ironclad records so that Congressional investigators can't come around later and blame them for being lax. Consequently, they order more and more tests and more and more scientific information before approving a drug."

This official observed that it now costs about $250,000 to process a new drug application. When FDA officials say that a given compound should be tested for two years on dogs, instead of 90 days on mice, it means an additional $125,000. One result, he said, is that it is becoming increasingly difficult for smaller companies to file new drug applications and to compete with the larger firms.

Under the law, drug firms must submit applications, complete with supporting scientific and clinical data, on all new drugs. They must do the same for variations of older compounds, for new dosage forms and for new uses of approved drugs.

When a drug application is received at FDA, it is checked for all required data. If the application is not complete in the opinion of FDA medical officers, the companies are requested to supply more data. Only when this entirely satisfies the FDA is the application officially filed.

Once an application has been filed, it becomes automatically effective in 60 days unless FDA formally disapproves it or asks for another 180 days in which to consider it. At the end of the additional 180 days, it has to be disapproved or it becomes effective.

The new drug branch, headed by Dr. Ralph G. Smith, receives 30 or more original applications on new drugs every month. In addition, it has to process another 100-200 supplementary applications on such items as new dosage forms.

To sift through all these applications, Dr. Smith's branch has a total of only seven full-time and four half-time medical officers. Recently, however, one man came down with hepatitis, a second broke a leg and the third was on a special project. Even so, this is an improvement over 1950 when there were only two medical officers.

Dr. Smith feels that the larger staff may explain some of the apparent slowdown. Now his men are able to look at applications more closely and they feel freer to ask for more data without expecting to fall hopelessly behind the backlog.

During the last quarter of 1959, the ratio of applications received to those approved was 89 to 46. In the first quarter of 1960, it was 104 to 43—the lowest recorded in three years. In the second quarter, applications dropped to 81 and approvals totaled 51. In the third quarter, applications fell again to 71 and approvals totaled 44. In the final quarter, the slump continued again with applications dropping to a three-year low of 65 and approvals to a mere 27—a 41 per cent ratio.

During 1960, FDA officials admit they were heavily preoccupied with the Kefauver hearings as well as the separate investigations which grew out of the scandal surrounding Dr. Henry Welch, chief of the Antibiotics Division. Dr. Welch resigned under fire after it was disclosed he had collected substantial sums through publications devoted to antibiotics over which he exercised supervision.

Two separate groups, one set up by the National Academy of Sciences and one appointed by former Health Secretary Flemming, gave FDA a generally clean bill of health. But the inquiries, as well as the Congressional hearings, took their toll. Inevitably, they caused delays in the FDA's new drug branch.

If all the fuss also produced a cautious psychology, it is not consciously recognized by Dr. Smith and his colleagues. They concede there may have been some subconscious tightening up, but insist that there has been a general trend, quite apart from the hearings and investigations, toward more detailed requirements and therefore some slowing down on drug processing.

They point out that new drugs are more complicated than they used to be. Often, they involve completely new chemical entities and sometimes are more potent than their predecessors. Standards of critical evaluation have also increased so that, in general, more information, more supporting data and tests are being required.

The fact that the general trend seems distinct from the Kefauver investigation and its aftermath is supported by figures developed by Paul deHaen, consultant to the pharmaceutical industry and allied professions. Total new products introduced nationally rose from 321 in 1951 to 403 in 1955. But since then there has been a steady tapering off—from 401 in 1956, to only 311 in 1960.

During the same period the introduction of new single chemical entities vacillated—35 in 1951, 31 in 1955, 51 in 1957, 44 in 1958, 63 in 1959 and 45 in 1960. Thus, more new chemical entities were introduced last year — despite the overall slump — than in 1958 when the general output was higher.

In short, FDA officials feel that deeper forces are at work on the patterns of drug approvals than the cautious psychology that may have been inspired by the investigations. These are related to the growing complexity of new chemicals and the greather sophistication of the scientific and clinical data required to evaluate them.

As one high official puts it: "I haven't seen any figures yet that would make me admit anything—certainly not that there has been any deliberate foot-dragging." ■

ORIGINAL APPLICATIONS TO FDA ON NEW CLINICAL DRUGS

YEARS BY QUARTERS	1958		1959		1960	
	NUMBER RECEIVED	NUMBER APPROVED	NUMBER RECEIVED	NUMBER APPROVED	NUMBER RECEIVED	NUMBER APPROVED
1st quarter	76	40	83	51	104	43
2nd quarter	96	52	108	68	81	51
3rd quarter	81	66	95	66	71	44
4th quarter	100	50	89	46	65	27
TOTAL FOR YEAR	353	208	375	231	321	165

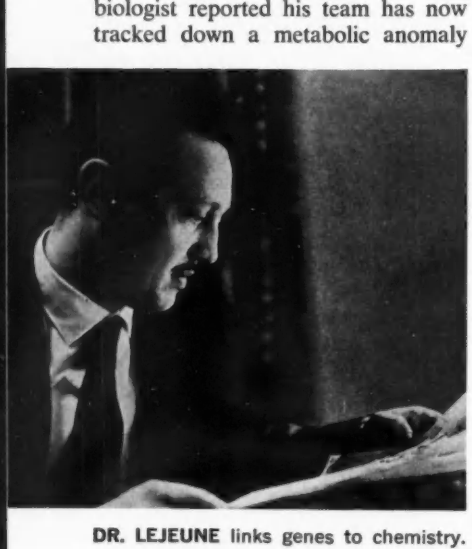
METABOLIC ERROR PINPOINTED IN MONGOLHI

Tracking down the genetic anomaly, French biologists find that mongoloids have a defect in tryptophan metabolism which may be the cause of impaired brain function

When biologist Jerome Lejeune of the University of Paris first declared publicly that mongols have an extra chromosome, the announcement was received with some skepticism. That was in 1958.

The discovery is now known as the classic "21 chromosome trisomy" —the existence of a triple 21 chromosome rather than the normal pair. Not only has this been universally accepted, but it has led to intense research on chromosome anomalies connected with a number of inborn diseases.

A fortnight ago, Dr. Lejeune again caught the scientific world by surprise. Lecturing at the 150th anniversary of Massachusetts General Hospital in Boston, the young pediatrician-biologist reported his team has now tracked down a metabolic anomaly in mongoloid children. "There is no reason to say that mongolism is definitely incurable," added Dr. Lejeune.



DR. LEJEUNE links genes to chemistry.

The metabolism research was carried out at the Trousseau Hospital in Paris by Drs. Henry Jerome, Raymond Turpin and Lejeune on 15 trisomic mongol children and 16 controls. None of the mongol children excreted normal amounts of three by-products of tryptophan: 5-hydroxy-indole-acetic acid (5-HIAA), indole-acetic acid (IAA) and xanthurenic acid. And one of the links in the chain between tryptophan and 5-HIAA happens to be serotonin, a substance generally believed to play an important part in brain function. Dr. Lejeune's hypothesis: Mongols are affected by a low serotonin content in the brain—as are children suffering from phenylketonuria.

Excess of Enzymes

"It may seem odd," says Dr. Lejeune, "that mongol children with an extra chromosome, and thus an excess of genetic material, would be short of one or more enzymes necessary for tryptophan metabolism. Actually, it is likely that they are not. Instead, they problably have an excess of enzymes, and there may be a speed-up effect along some of the tryptophan metabolism pathways (as kynurenine and 30-hydrokynurenine) at the expense of others."

Can this error of metabolism be corrected? Dr. Lejeune's hope that it can is linked, oddly, to an experiment performed 23 years ago which few scientists today even remember: the cure of a chromosomal anomaly in the Drosophila.

The fly larvae had inherited a mutation producing the long-known "bar eye"—small, slitted eyes. Attempting to cure the defect, Sorbonne biologists Ephrussi, Khouvine and Chevais fed purified extract of fly pupa to "bar eye" larvae.

Larvae thus treated then grew to be normal flies, with normal eyes. The experiment became a pet project of Dr. Chevais, who died in 1944, and it has apparently not been repeated since. But it does offer an experimental foundation for similar research in human chromosomal anomalies.

The problem, however, is no small one, says Dr. Lejeune. Nearly two years of research by the Trousseau Hospital team has yielded some information, but no positive results.

It is crucial, for instance, to find out just which metabolic change is responsible for the major defect of mongolism, then to find a substance which could be administered at birth to counteract it.

The French investigator notes it is very possible that the tryptophan metabolism anomaly may not be the one—or the only one—that causes mental deficiency in mongol children. He believes that the children are born equipped to develop normal intelligence, but that some metabolic reactions may run too fast. Even if one of the major defects of this genetic imbalance could be controlled, attempting to cure all of them would remain a formidable task.

Success in this line of research would not only spare countless children from growing up with severely impaired intelligence (it is estimated that one of 500 children born is a mongoloid idiot) but would give hope of treatment of many hereditary ills now termed incurable.

During the two years since the discovery of the 21 trisomy by Drs. Lejeune, Marthe Gautier and Turpin, biologists have observed some 30 chromosomal anomalies associated with various diseases. New chromosome anomalies are reported in the literature at the rate of about one a month.

Chromosomes and Intelligence

Already a generalized pattern has emerged. A majority of chromosome aberrations, for instance, affect the intelligence. (This is not an absolute. Recently a minister who had fathered a mongol child was found to have 47 chromosomes and, according to a report in *Lancet*, "he may thus be the first exception to the rule that chromosomal anomalies and university degrees are incompatible.") The mechanism of production of mongols by disjunction or translocation has been described (MWN, Aug. 26, 1960). Multiple trisomies also have been reported; in one, every chromosome pair resulted in an entirely triploid individual with 69 chromosomes. Scientists are often surprised that individuals with aberrations of such large amounts of genetic material even survive.

Observations have given rise to the hope of mapping chromosomes—identifying genes or groups of genes

GOLCHILDREN

on the chromosome with certain phenotypic traits. For instance, it has been established that: 1) mongols, in addition to the 21 trisomy, have an abnormal lobulation of nuclei of granulocytes; 2) acute leukemia is about six times more frequent among mongols than among normal children; and 3) in leukemia (though not in the acute form) half of an arm on chromosome 21 (or perhaps 22) is missing. Some leukemic patients have a small, aberrant chromosome in the leukocytes.

A conservative hypothesis, says Dr. Lejeune, is that a gene, or a block of genes, are located on the distal end of the 21 chromosome—the end opposed to the centromere and satellites. And this group of genes normally regulates leucohematopoiesis.

Special Banding Pattern

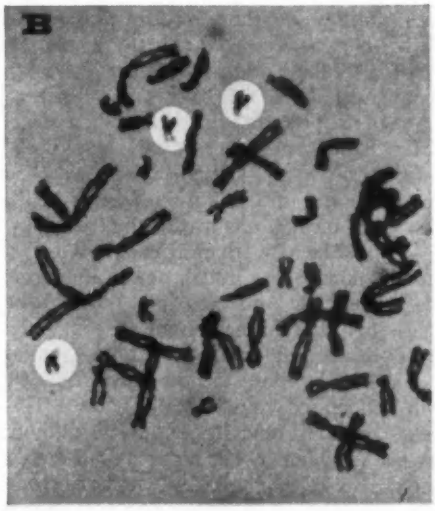
Yet, says Dr. Lejeune, if we are to hope to establish a complete genetic map for man, it will be necessary to observe on human chromosomes a distinct banding pattern, similar to that occurring naturally along the chromosomes of the fruit fly. This would permit the identification of groups of genes with specific bands. There is evidence, says Dr. Lejeune, that this kind of pattern can occur in human chromosomes.

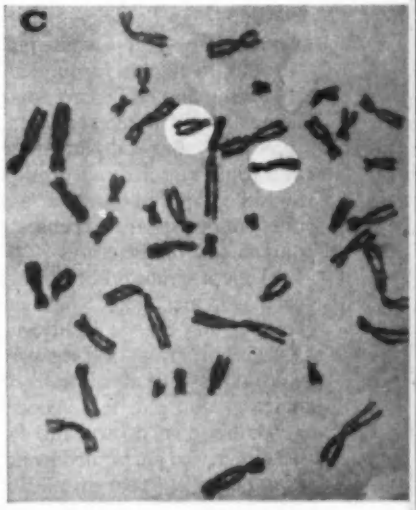
His evidence is the result of a perplexing stroke of luck. One day, in preparation for the lab assistant's vacation, a charwoman at Trousseau Hospital was instructed by budget-conscious researchers in the simple task of feeding tissue cultures. Micrographs of one of the cultures she "fed" showed a structural differentiation inside the chromosome, somewhat similar though not as clear as bands seen in the Drosophila. The feat, however, has not yet been reproduced.

Cytogenics, says Dr. Lejeune, must not be restricted to genetic counseling. Even more important than the mapping of various traits would be the establishment of solid relationships between cytogenics and biochemistry, leading to the possibility of chemical correction of inborn defects. This has now become the principal goal of the Trousseau Hospital team. ■



CHROMOSOME COUNT in normal man totals 46, classified by size, in pairs numbered from #1 to #22 (above A). Sex chromosomes X and Y are not numbered. Mongol pattern (B) has #21 in triplicate—a trisomy. A translocation in polydyspondilism (C) shows #22 fused to #13, possibly with some loss of genetic material.





DISEASES IDENTIFIED WITH CHROMOSOMAL ABERRATIONS
(In order of discovery)

NAME OF DISEASE	CHROMOSOMAL ANOMALY	CLINICAL SYMPTOMS
MONGOLISM	One extra #21 chromosome (trisomy)	Flattened skull, oblique eye slit, idiocy
KLINEFELTER SYNDROME	One extra X chromosome, resulting in XXY pattern	Feminizing effects, sometimes impaired intelligence
TURNER'S SYNDROME	One X chromosome missing (XO)	Immature female sexual development
POLYDYSPONDILISM	Translocation—fusion of #22 to #13, with some loss of genetic material	Lesions of the vertebrae, borderline intelligence
EXCEPTIONAL MONGOLISM	Extra #21 chromosome, with translocation of one to #13 or #14	Same as other mongols
UNNAMED AS YET	One extra #17 chromosome	Multiple malformation, always fatal
TRISOMY OF PATAU	Trisomy of either #13 or #15	Anophthalmia, cleft palate, always fatal
SUPERFEMALE	Trisomy of X chromosome	Impaired intelligence
HYPOFEMALE (PARTIAL)	Part of one X chromosome missing	Female with somewhat masculine appearance
HYPERKLINEFELTER SYNDROME	XXXY pattern	Same as Klinefelter syndrome, with primary amentia
DOUBLE MALE	XYXY pattern	Malformed genitalia
CHROMOSOMAL MOSAIC	Mixed populations of cells such as XY/XO or XXY/XX	True hermaphrodites
LEUKEMIA (chronic granulocytic and chronic myeloid)	Abnormal autosome resulting from loss of portion of #21 or #22 chromosome	Progressive anemia, internal hemorrhage and other symptoms of leukemia

KENNEDY'S 'VERY MODEST PROPOSAL'

The President's first health package to Congress includes Federal health care for the aged tied firmly to Social Security financing — just what the doctors didn't order

President Kennedy has sent Congress his official proposal on Federal health care for the aged. To nobody's surprise, it's just what the doctor didn't order. The program is tied firmly to Social Security.

The plan calls for a $1.5 billion increase in Social Security deductions to provide protection for 14.2 million aged "who have no wish to receive care at the taxpayers' expense."

All Social Security beneficiaries who are 65 or over—women included —would be eligible for limited hospital and nursing home care, outpatient diagnostic and home services.

Surgery and outpatient medical care would be ruled out. And patients would be required to make "a modest contribution toward expenses to discourage any malingering.

"This program is not a program of socialized medicine," Kennedy declared in his special health message. "It is a program of prepayment of health costs with absolute freedom of choice guaranteed. Every person will choose his own doctor and hospital.

"No service performed by any physician either at home or office and no fee he charges for such services would be involved, covered or affected in any way. There would be no supervision or control over the practice of medicine by any doctor or over the manner in which medical services are provided by any hospital."

The new program is similar to the Kennedy-Anderson bill which was killed last year by a combination of Republican and Democratic conservatives, plus the Eisenhower administration. But there is one big difference: This new bill has a better chance.

Although the Republican-Southern Democratic coalition still represents a major hurdle, the power of the White House and other factors have added considerable strength to the so-called Forand forces. This, and some political breaks, might turn the trick.

The new program, expected to cost about $500 million more than the Kennedy-Anderson plan, would be financed through an increase in Social Security payroll deductions. As of Jan. 1, 1962, the tax base would be increased from $4,800 to $5,000. This would produce about $400 million. As of Jan. 1, 1963, the tax rate would also be increased by one-half of one per cent, with employees and employers sharing the burden. This would net an additional $1.1 billion, for a total of $1.5 billion.

On an individual basis, workers earning more than $5,000 would be charged an extra $6 a year in 1962 and another 12.50 beginning in 1963. The same would apply to employers.

The benefits will include:

Hospitalization — Inpatient hospital services up to 90 days "in a single spell of illness." Patients would pay $10 a day for the first nine days ($20 minimum); the program would bear the full costs of the remaining 81 days. Kennedy says major emphasis is placed on these costs because they are "by far the heaviest and most unmanageable."

Nursing Homes — Skilled nursing home services up to 180 days "immediately after discharge from a hospital." Nonhospital-connected care is not covered, but as an incentive to use these less expensive services, the program allows two nursing home days for every one hospital day.

Diagnostic Services—Hospital outpatient clinic diagnostic services for all costs (in one year) in excess of $20 which would be paid by the patient. Kennedy believes this would "reduce the need for hospital admissions and encourage early diagnosis."

Home Services—Community visiting nurse and related services for up to 240 days a year.

The President called his new bill "a very modest proposal" aimed at eliminating a "significant gap" and meeting "absolutely essential needs." The deductible features, he maintains, are sufficient to "discharge any malingering or unnecessary overcrowding of our hospitals.

Administration officials point out that if the new Social Security program is put into effect, it will spur Blue Cross and the commercial carriers to offer expanded coverage in other categories, since the high-risk aged group would be removed.

To help improve nursing home care for the aged. Kennedy is calling for doubling Federal grants for nursing home construction (from $10 to $20 million) to provide another 2,700 beds a year. He also urges "stimulatory" grants to spur states and com-

CONTINUED ON PAGE 23

KENNEDY'S SIX POINT HEALTH PROGRAM

Health Insurance for the Aged—All Social Security beneficiaries 65 and over eligible for 90-day inpatient hospital service; 180-day nursing home service after discharge from hospital, outpatient clinic diagnostic services for all costs in excess of $20; community visiting nurse service. Program's finances to come from increased Social Security payments by employers and employees.

Nursing Home Facilities and Services—Includes matching Federal grants, doubled from $10 to $20 million, for more nursing homes and more beds; another matching grant of $10 million for improved services; creation of a Federal bureau of community health.

Medical School Aid—Ten-year matching grant program to spur construction of new medical and dental schools and expansion of established ones; Federal scholarships for talented needy students plus "cost of education" grants to institutions.

Child Health—Recommends establishing a national institute for child health and increase in funds for HEW programs.

Medical Research—Increase in Federal spending over and above the $540 million recommended in Eisenhower budget; expansion of research construction facilities.

Vocational Rehabilitation—Increase in matching grants.

For matched tubular diuresis–



IN BOTH PROXIMAL AND DISTAL SEGMENTS

HYDROCHLOROTHIAZIDE
acts mainly in the proximal segments of the renal tubules.

ALDACTONE® (spironolactone)
acts mainly in the distal segments of the renal tubules.

NEW

ALDACTAZIDE®

(brand of spironolactone with hydrochlorothiazide)

ALDACTAZIDE now offers physicians the only therapeutic preparation to provide positive diuretic activity in both the *proximal* and the *distal* segments of the renal tubules.

Hydrochlorothiazide exerts a well-known, vigorous diuretic action in the *proximal* segment of the renal tubules. The Aldactone component of Aldactazide specifically blocks the sodium-retaining and potassium-excreting effect of aldosterone in the *distal* segment.

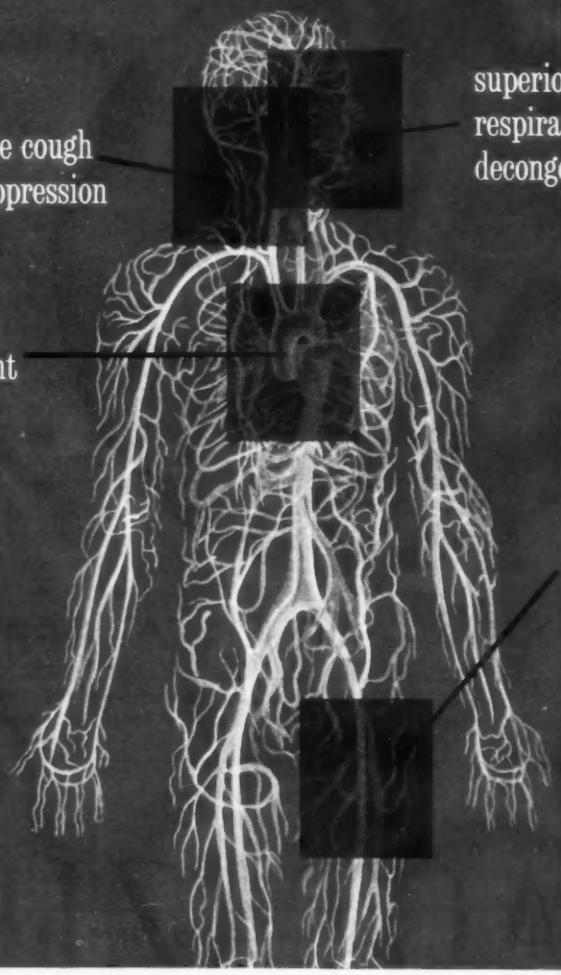
This combined control provides true multiple diuretic effects for optimal relief of edema and ascites in patients requiring prompt, maximal control, and in those whose edema and ascites are resistant to single diuretics. Further, the potassium-saving activity in Aldactazide largely or wholly offsets the danger of potassium loss which thiazide diuretics induce.

The usual *adult* dose of Aldactazide is one tablet four times daily, although dosage may range from one to eight tablets daily.

Aldactazide is supplied as compression-coated white tablets, each tablet containing 75 mg. of Aldactone (brand of spironolactone) and 25 mg. of hydrochlorothiazide.

G. D. SEARLE & CO.
CHICAGO 80, ILLINOIS
Research in the Service of Medicine

for relief from the total cold syndrome...



Tussagesic*

timed-release tablets/suspension

Each Tussagesic timed-release Tablet provides:

TRIAMINIC®	50 mg.
DORMETHAN (brand of dextromethorphan HBr)	30 mg.
TERPIN HYDRATE	180 mg.
APAP (acetaminophen)	325 mg.

Dosage: *Adults and children over 12* – one tablet in the morning, midafternoon and at bedtime. Each tablet should be swallowed whole to preserve the timed-release action.

Each tsp. (5 ml.) of Tussagesic Suspension provides:

TRIAMINIC®	25 mg.
DORMETHAN (brand of dextromethorphan HBr)	15 mg.
TERPIN HYDRATE	90 mg.
APAP (acetaminophen)	120 mg.

Tussagesic Suspension is especially suited for children and for adults who prefer liquid medication; it is pleasantly flavored, non-narcotic and non-alcoholic.

Dosage (to be taken every 3 or 4 hours): *Adults and children over 12* – 1 or 2 tsp.; *Children 6 to 12* – 1 tsp.; *Children 1 to 6* – ½ tsp.; *Children under 1* – ¼ tsp.

*TRADEMARK

DORSEY LABORATORIES • a division of The Wander Company • Lincoln, Nebraska

KENNEDY'S PROGRAM CONTINUED

munities "to improve the quality of services in nursing homes," to "develop organized community home-care services," and to undertake more research to insure "the maximum economical use" of hospitals.

Elsewhere on the health front, the President urged action on a great variety of problems.

Medical School Aid

He said there must be "substantial increases in enrollment in existing schools, plus 20 new medical schools and 20 new dental schools." At the same time, there must be more assistance to "help more talented but needy students" to enter the health professions.

He proposed a ten-year matching grant program to spur construction, expansion and restoration of medical and dental schools. It would involve $25 million in aid the first year, $75 million annually thereafter. Where the money is used to build a new school, or to provide facilities for new students, the Government would put up two-thirds instead of just half of the cost as an incentive.

The President also recommended Federal scholarships to each institution, totaling $1,500 for as many as one-fourth of newly enrolled students. The school could award assistance on a four-year basis according to the individual's need, but not exceeding $2,000 per student in any given year. The program would run for ten years.

Child Health Recommendation

The President also recommended a special "cost of education grant" to the school of $1,000 for each scholarship. He said this feature would, among other things, "give some encouragement to institutions now doubtful about the burden of establishing new medical and dental schools."

Kennedy accompanied the proposals with the declaration that "we must increase sharply the rate of doctor and dentist training merely to keep pace with our growing population—and we need far more if, as part of our international responsibilities, we are to help meet critical medical needs in key areas of the world."

To better meet the health needs of children, the President recommended creation of a national institute for child health at NIH and an increase in funds for HEW programs in the child health field. In addition, he called for more action on the problem of physical fitness.

The President announced he would press for increases in Federal spending on medical research over and above the $540 million recommended in the new Eisenhower budget. But he did not specify the precise amount.

He also urged expansion of the research construction facilities program from the present level of $30 million to $50 million a year. And, like the others before him, he called for removal of the Congressional limitation on Federal payment of indirect overhead costs.

In regard to the vocational rehabilitation programs, he said he would ask for an increase in Federal matching grants, but did not spell out the amount.

All in all, it was a large health package. Many of the features were familiar. Indeed, some of them, like aid to medical schools, have been around for a long time. How many will survive the legislative battle of the "New Frontier" Congress remains to be seen. ■

HOW COMMON IS THE COLD?

Just how common is the common cold?

One in five of all acute conditions (those lasting from one to 90 days) are colds, according to a survey published in Parke-Davis' *Patterns of Disease*. Together with other respiratory infections, colds put more Americans out of action each year than all other acute illnesses combined.

Respiratory infections, says the survey, waste a staggering amount of time: 80 million workdays a year, or 41 per cent of all days lost due to acute conditions.

Among school children, the toll is even greater: more than 110 million school days—58 per cent of all absences each year.

Where are colds commonest?

City dwellers get nearly 72 colds per year per 100 persons; farmers, only 56. Regionally, incidence ranges from a high in the northeastern states —77 per 100 persons annually—to a low in the southern states—61 per 100 persons annually.

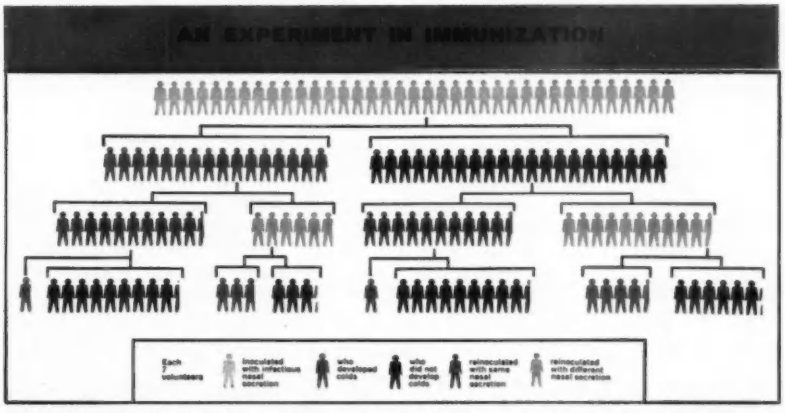
Who gets the most respiratory infections?

Women lose 159 workdays annually (per 100 employees) compared to 123 days for men. And large families are more prone to infection than small ones. One study finds an influenza attack rate of about 30 per cent in families of three members, 52 per cent in families of 13. Those in lower socio-economic levels have higher attack rates.

What can be done about a cold?

Vaccination against influenza somewhat cuts down the rate and severity of colds. Immunization also appears to be useful against adenovirus infections—at least among military recruits. Finally, study indicates that insufflation of nasal secretions from persons infected with colds reduces colds —but only of one kind of virus.

In short, says *Patterns*, the common cold is "the most important unsolved respiratory disease problem today." ■



VOLUNTEERS who inhale nasal secretions from infected persons have fewer colds over 45-week period. But protection doesn't extend to other cold-causing viruses.

Special Darvon Series Ad
March, 1961—4-color
2-page spread oversize—gutter bleed 15 x 10¼

tool of research

RATTAIL HEAT TECHNIC

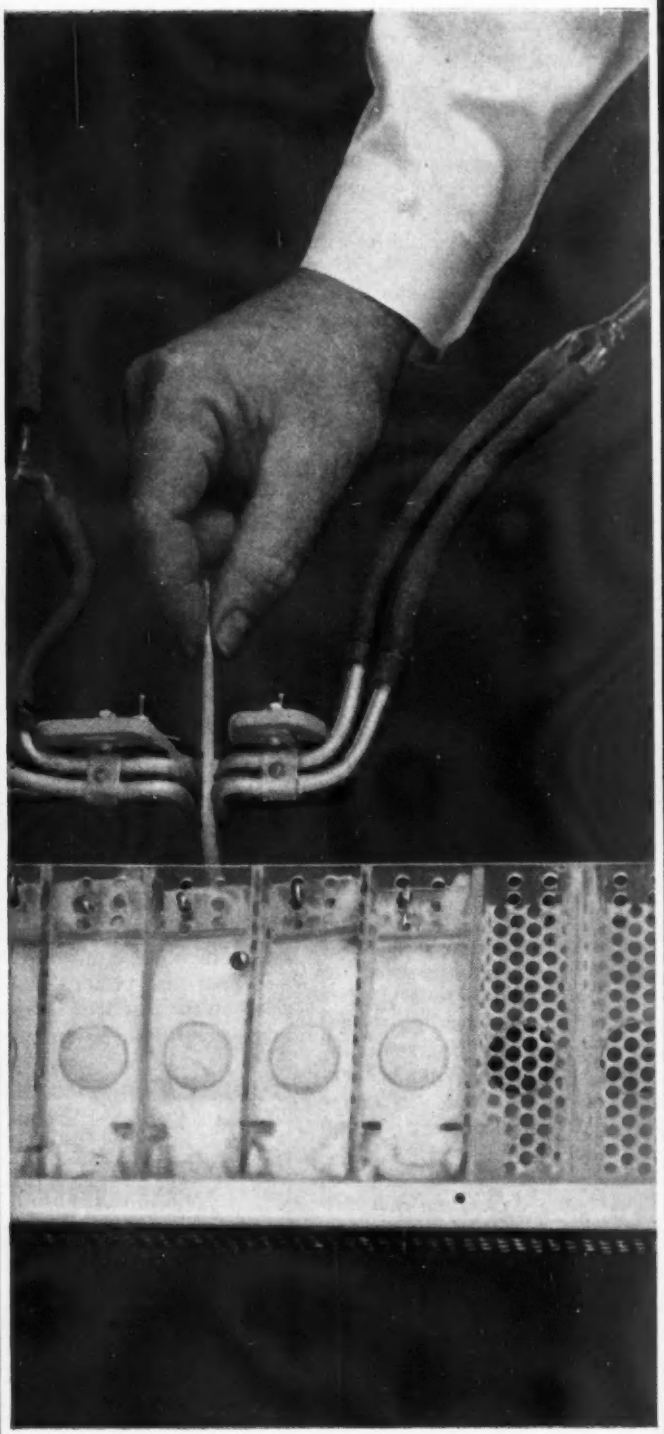
Twenty rats, in groups of four, are used in this modification of the method described by Davies *et al.*[1] The pain stimulus is provided by a heated resistance wire placed near the rats' tails. Direct contact with the hot wire is prevented by a specially designed water-cooled tail rest. Observers record the time interval that animals take to respond (tail jerk) to the heat stimulus.

Untreated rats react within three to six seconds. Any prolongation of this reaction time in animals receiving test medication is an indication of analgesia.

The rattail heat technic is one of many tests used by Lilly scientists to study the analgesic properties of compounds such as Darvon®.

1. Davies, O. L., Raventos, J., and Walpole, A. L.: Brit. J. Pharmacol., 1:255, 1946.

Darvon® (dextro propoxyphene hydrochloride, Lilly)



Rattail Heat Technic . . . valuable in preliminary screening of drugs for analgesic activity. Specially designed water-cooled tail rest prevents direct contact with hot wire.



■ "... *the substitution of propoxyphene [Darvon] for codeine provides a distinct advantage.*"

Gruber, C. M., Jr.: J.A.M.A., 164:968, 1957.

product of Lilly research

DARVON effective • safe • well tolerated

Darvon is a unique analgesic discovered and synthesized in the Lilly Research Laboratories. Milligram for milligram, Darvon is equal to codeine in intensity and duration of analgesic action yet has fewer side-effects.

Darvon is safe . . . Contraindications to Darvon have not been observed. Darvon does not produce adverse changes in the peripheral blood, liver function, kidney function, or clinical progress. Even after prolonged therapy, Darvon . . .

- does not cause physical dependence
- does not produce euphoria
- does not lose analgesic activity

Usual Dosage: 32 mg. every four hours or 65 mg. every six hours.

Darvon is available in 32 and 65-mg. Pulvules®.

130232

Lilly
QUALITY / RESEARCH / INTEGRITY

■ relief
from pain,
fever, and
inflammation



DARVON® COMPOUND and DARVON COMPOUND-65

Both products combine the analgesic advantages of Darvon with the antipyretic and anti-inflammatory benefits of A.S.A.® Compound. Darvon Compound-65 contains *twice* as much Darvon as regular Darvon Compound without increase in the salicylate content or size of the Pulvule.

Formulas:

Darvon Compound		Darvon Compound-65
32 mg.	Darvon	65 mg.
162 mg.	Acetophenetidin	162 mg.
227 mg.	A.S.A.®	227 mg.
32.4 mg.	Caffeine	32.4 mg.

Usual Dosage:

Darvon Compound: 1 or 2 Pulvules three or four times daily.

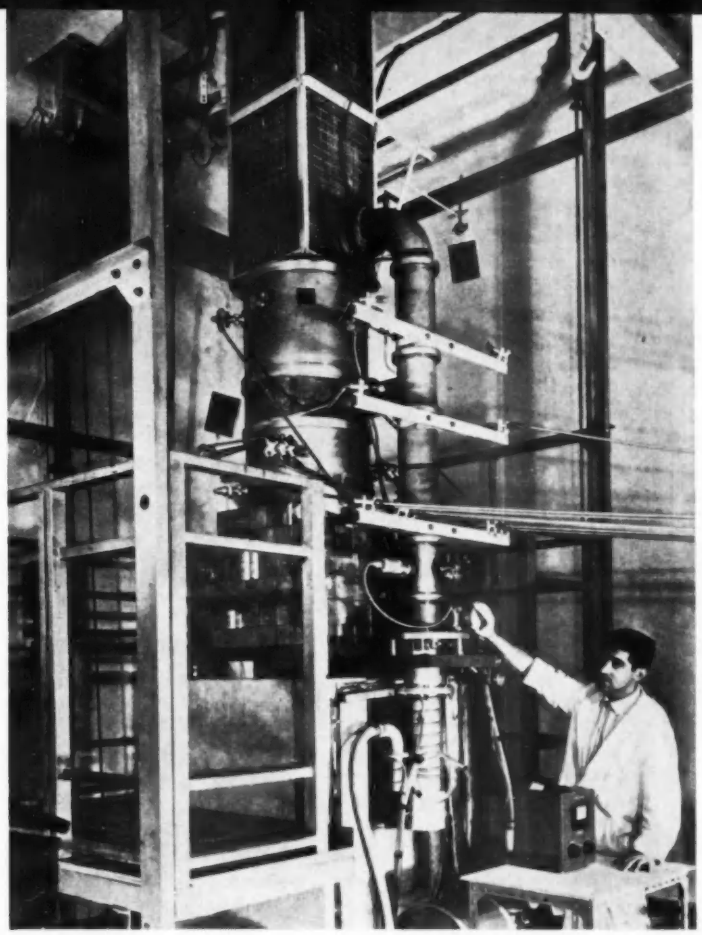
Darvon Compound-65: 1 Pulvule three or four times daily.

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)
A.S.A.® Compound (acetylsalicylic acid, acetophenetidin, and caffeine, Lilly)
A.S.A.® (acetylsalicylic acid, Lilly)

120232

FRENCH GET INTIMATE VIEW OF LIFE

Using an electron microscope four stories high, Toulouse biologists take unprecedented photographs of living cells



MICROSCOPE portion of apparatus is ten feet high, weighs four tons.

A French research team has just taken a giant step in microscopy.

With the world's largest electron microscope—a new 40-foot complex ten times more powerful than previous instruments—they have made the first ultra-magnified pictures of living cells.

The feat vastly expands the already extraordinary capabilities of electron microscopes—which revolutionized biology by opening to view the fine structure of cells and microorganisms (see p. 28).

Prof. Gaston Dupouy, who heads the French project, told the French Academy of Sciences that the new microscope does what others have failed to do because it operates at 750,000 to 1,000,000 volts (conventional instruments reach a peak of only 100,000).

The instrument's 30-foot electron "gun" emits a stream of particles moving at close to the speed of light. And part of the gun's energy is transformed into mass, in accordance with Einstein's mass-energy equation; at a million volts, the electrons' normal weight triples.

These high energy electrons produce less cell damage than the slower particles in conventional instruments, just as a fast-moving bullet will merely make a hole in plate glass which a slower missile would shatter.

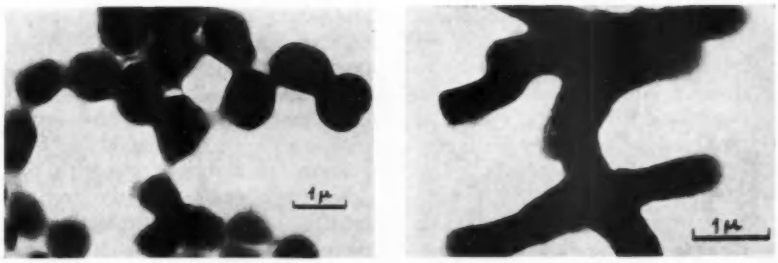
And the fast-moving "heavy" electrons can punch through cells up to a micron thick with energy to spare. Ultra-thin slicing of specimens is eliminated.

Moreover, a sharp reduction in "scatter" makes possible the use of a tiny observation chamber with windows of collodion film. The removal of air—which scatters weaker electrons the way fog dissipates a beam of light—is no longer necessary, and organisms can be kept alive at normal atmospheric pressure.

Life at 100,000 Diameters

The microscope is still undergoing modification, but the French team has already photographed half a dozen microorganisms, including Staphylococcus, Corynebacterium and B. anthracomorphus. And all the organisms remained alive — they reproduced

CONTINUED ON PAGE 28



LIVE Staphylococci (l.) and Corynebacteria are caught under magnification of 11,000.

after being photographed, Prof. Dupouy declares.

The French investigators believe that the new instrument will enable them to film the entire life cycle and reproduction of bacteria at magnifications up to 100,000 diameters, the same as conventional electron microscopes. So far, they have achieved magnification of 30,000 vs 2,000 for the best optical microscopes that can view living cells. Ultimately, they hope, still higher resolutions will make possible man's first look at the internal structure of individual molecules.

Other possible projects include the sequence of events by which a virus reproduces within a cell and destroys it, as well as "action shots" of such intracellular structures as chromosomes and mitochondria. Present knowledge of these phenomena has had to be pieced together from "still-life shots" of dead organisms.

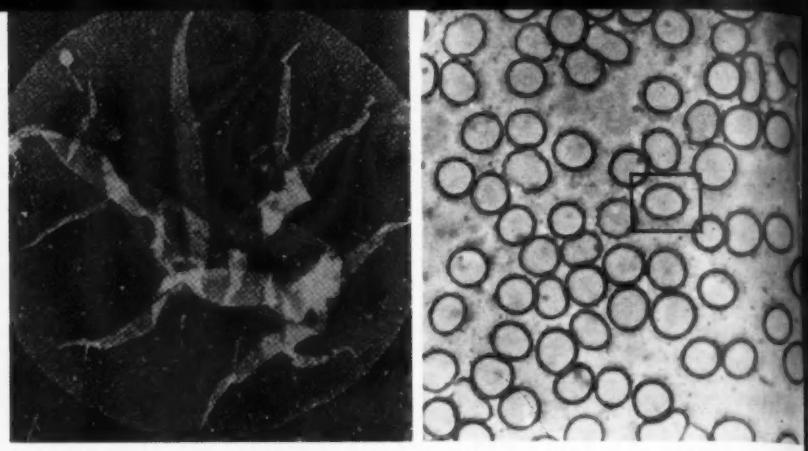
Four Tons of Microscope

The microscope occupies an 80-foot steel and aluminum sphere at France's Centre National de la Recherche Scientifique, near Toulouse. A generator and the electron gun are located in the sphere's upper portion. Below is the microscope itself, ten feet high, with massive focusing electromagnets that give it a weight of close to four tons.

The ultra-high energies employed lead to peculiar operational problems. Stray electrons striking the metal framework of the apparatus generate dangerous x-rays, and parts of the instrument must therefore be shielded with lead bricks. Focusing is carried out by remote control, with the aid of two television cameras.

The TV cameras also help to ensure that organisms will not be killed during observation. The brightness and contrast of the images they yield can be stepped up electrically, as in an ordinary TV set, making possible a reduction in the number of electrons passing through the specimen.

If the new microscope lives up to its advance billing, it will constitute a major landmark in the study of microphysiology. Summing up its possibilities, Dr. Pierre Lépine, chief of the Pasteur Institute's virus laboratory, declares: "For the first time we are going to surprise life in movement, in the field of the 'infinitely small.' " ■



ERYTHROCYTE viewed by electron microscope (l.) reveals fine detail of collapsed cell membrane. Light microscope photo (r.) shows shape but no structure.

SMALL WORLD REVEALED BY

In less than a generation the electron microscope has provided a new window for medical and biological researchers

The news that man can now visualize living cells with an electron microscope is the latest development in the brief but glittering history of an instrument that in a bare 20 years has revolutionized basic biological investigation and, with it, medical science. Even before this latest development, the electron microscope has revealed, with wonderful clarity, details of structures and processes never seen before: individual antibody molecules; the internal architecture of viruses; the double spiral of DNA, the material of genes; crystals of insulin within the pancreatic cell. And prospects are bright for use of electron microscopy as a super-diagnostic tool. Already studies indicate that it can be used to help differentiate nephrosis, glomerulonephritis and other clinically confusing renal pathologies.

Until the mid-1930's, man's view of the microscopic world was restricted to 2,000 angstroms (1 angstrom equals 10^{-8} cm). This is the limit of practical magnification under ordinary white light, although ultraviolet light and quartz lenses can bring the visual range down to some 800 angstroms.

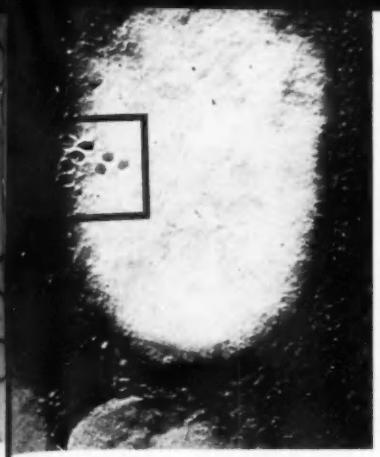
To this roadblock in the path of the microscopist came two discoveries: first, the theoretical prediction of Prince Louis de Broglie that moving electrons behave like light waves; and, second, the practical finding that a beam of electrons could be focused by a magnetic field, much as a glass lens focuses a beam of light.

Since electrons have a wavelength 100,000 times shorter than light it follows that they can resolve far smaller objects.

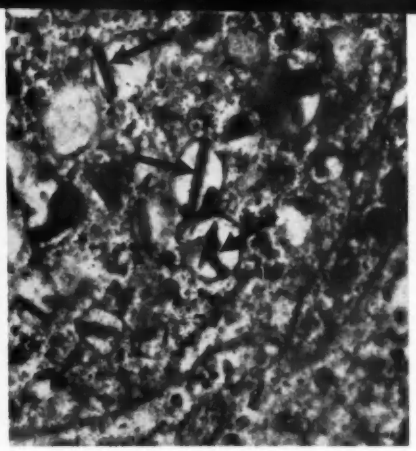
During the early 1930's, these two discoveries were brought together in the electron microscope. The first instrument, a crude affair, was built in Germany. Then, in 1938, a much improved microscope was constructed by a young graduate student at the University of Toronto. Two years later, Radio Corporation of America called on this student, James Hillier, to design and build the first such instrument in the United States. Hillier is now

TOOTH enamel crystals are magnified 57,000 times. Too hard for thin sectioning, they are studied by "replica."





BACTERIOPHAGE particles form within a diseased cell of colon bacterium.



INSULIN is stored as crystals in beta granules of normal pancreatic cell.

BY ELECTRON BEAMS

vice-president of RCA Laboratories.

Today, more than 1,500 electron microscopes are in use throughout the world and current models can resolve details down to an almost incredible 10 to 20 angstroms (1 to 2 millionths of a millimeter).

A number of serious hurdles had to be overcome before the biologist could put this new tool to work. Special techniques had to be devised to prepare specimens. As a result, only within the last five years has the electron microscope been in regular use for medical and biological research.

In light microscopy, structural details are brought out with the aid of dyes and stains; light and dark areas of the image are formed by the transmission and absorption of light. The comparable processes in the electron microscope are transmission and deflection, or "scatter" of electrons.

Unfortunately, most dyes and stains are composed, like living materials, chiefly of light elements which scatter electrons poorly. Biological specimens, therefore, must be coated or impregnated with heavy metals such as osmium, that possess good scattering properties, in order to form an image with sufficient contrast to bring out structural detail.

Additional difficulties stem from the fact that electrons have only a fraction of the penetrating power of light. Accordingly, tissue sections for electron microscopy must be sliced with exquisite thinness.

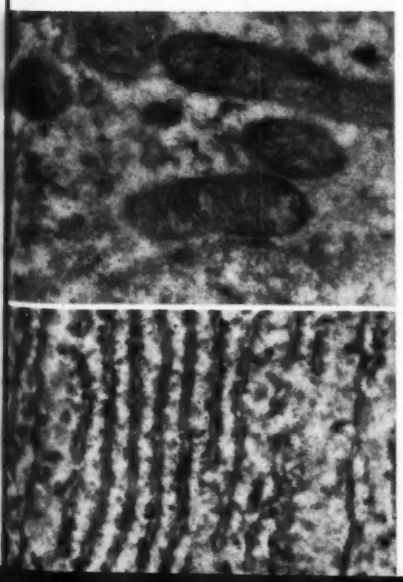
The development of practical thin-sectioning proved to be a most arduous problem. Conventional slicing equipment was totally inadequate. For example, the lubricating film in the advancing gears actually gave a variation in thickness greater than the thickness of the section needed for viewing.

The problem was finally solved by embedding the specimen in a plastic such as methyl methacrylate—a substitute for the paraffin wax used in conventional microscopy — and sections were sliced with a diamond knife moved by equipment of special design and built to the most exacting tolerances. Slicing sections only 25 millionths of a millimeter thick is now a routine procedure.

With the perfection of this technique the electron microscope began to open windows on heretofore un-

CONTINUED ON PAGE 30

FOR FIRST TIME, electron microscope shows details of mitochondria (top) and the endoplasmic reticulum (below).



Lilly

relief from
the insistent
pain of
malignancy
DARVON®
COMPOUND



Usual dosage:
1 or 2 Pulvules® three or four times daily.

Also available:
Darvon Compound-65.

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)

120232

SMALL WORLD CONTINUED

known details of subvisible cell life.

It was with the aid of the electron microscope, for instance, that the endoplasmic reticulum was discovered, a complex network of interconnecting vacuoles that segregate proteins for "export" outside the cell. The instrument has confirmed visually the theoretical picture of desoxyribonucleic acid as a coiled helix of genetic material. It has tracked the entry of polio and influenza viruses into the cell.

At Washington University, St. Louis, Dr. W. Stanley Hartroft has photographed pancreatic beta cells with insulin crystals crisply etched in storage. Moreover, he has traced the release of the hormone in response to physiological stimulation or to drugs. His observations strongly suggest that adult and juvenile diabetes are actually different diseases. Sites of insulin uptake indicate that diabetes in the adult, at the outset at least, involves primarily a blockage in release of insulin. The juvenile form, on the other hand, stems from a failure in primary synthesis of the hormone—a distinction of much importance to the therapist.

Potential for Diagnosis

Electron microscope studies of tissue pathology forecast the instrument's use in diagnosis. A notable example are the micrographs of biopsy specimens made by Dr. Marilyn G. Farquhar of the Rockefeller Institute, which show characteristic differences between nephrosis, glomerulonephritis and other kidney ailments.

Not content with their already remarkable accomplishments, electron microscopists look forward confidently to even more powerful instruments. Dr. Richard P. Feynman, a physicist at the California Institute of Technology, notes that no known physical law bars microscopes with 100 times the present magnifications.

With such instruments, able to resolve details one to two hundred millionths of a millimeter, "it should be possible to see individual atoms," says Dr. Feynman, thereby confirming the intricate molecular structures projected by the stereochemist.

Electron microscopists say that this goal will require greatly improved focusing systems and other major innovations. But the latest report from France suggests that the goal may be more quickly reached than expected. ■

IS THE HIPPOCRATIC OATH OUT OF DATE?

"Ομνυμι 'Απόλλωνα ἰητρὸν καὶ 'Ασκληπιὸν . . .

Probably not one American physician in 10,000 could read this without hesitation, although all of them have probably heard the words: "I swear by Apollo, the physician, by Aesculapius . . ."

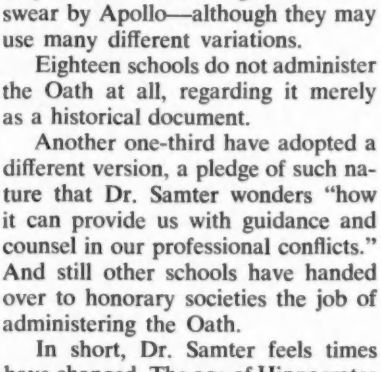
But chances are that many of those who recognize the oath have actually never taken it. Like the study of classical Greek, the Hippocratic Oath may be out of date.

This is the contention of Dr. Max Samter, professor of medicine at the University of Illinois, who surveyed deans of medical schools in the United States and Canada and found that only one-third of their graduates still swear by Apollo—although they may use many different variations.

Eighteen schools do not administer the Oath at all, regarding it merely as a historical document.

Another one-third have adopted a different version, a pledge of such nature that Dr. Samter wonders "how it can provide us with guidance and counsel in our professional conflicts." And still other schools have handed over to honorary societies the job of administering the Oath.

In short, Dr. Samter feels times have changed. The age of Hippocrates —the fifth century B.C.—was the classical age of Greece. Physicians were artists and their profession "the Art." The city-states were unconcerned with medical practices. Only the love of the art and the ethics of the Oath kept physicians from abusing their power.



DR. SAMTER asks for a new oath.

Yet, if the Oath were merely a code of ethics there would be little need to revise it now, the allergy specialist noted during a Northwestern University seminar on "Growth of Medicine." But Dr. Samter suggests that, in fact, the Oath represents a covenant with society—and there is little similarity between the serenity and harmony of Greece and the dissonance of the age in which we live.

"Patients change, physicians change, society changes," he says. "No covenant which applies to Greece can apply to us; no covenant which applies to medieval physicians can be valid for our times."

Trapped in a Revolution

A license to practice medicine in Salerno in A.D. 1224 included a clause that physicians must not make agreements with, or own, pharmacies. In A.D. 1960, 700 physicians in the U.S. operated their own pharmacies.

"All of us—physicians and patients alike—have been trapped in the scientific revolution which we now witness. The effects are startling. Diagnosis is as challenging as it ever was, if not more so, but treatment differs. A relatively small number of drugs are prescribed for the majority of the common diseases; the awareness of the physician that each of his therapeutic weapons covers a relatively 'broad spectrum' of illness is likely to diminish his diagnostic ambitions," Dr. Samter states.

"Material rewards of the practice of medicine have increased. It is not uncommon to find physicians in the upper third of the financial level of the community. The physician who will sacrifice his comfort and commit himself to a dedicated life—the general practitioner who takes care of backward communities, the scientist, the medical missionary—stands out more sharply than ever before."

Mass communication has also changed the practice of medicine, Dr. Samter points out. "On the printed page, on the radio, on television, information about medical matters is so effectively disseminated that patients

OATH OF HIPPOCRATES

I swear by Apollo, the physician, and Aesculapius and Health and Allheal and all the gods and goddesses that, according to my ability and judgment, I will keep this oath and stipulation: to reckon him who taught me this art equally dear to me as my parents, to share my substance with him and relieve his necessities if required; to regard his offspring as on the same footing with my own brothers, and to teach them this art if they should wish to learn it, without fee or stipulation, and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the art to my own sons and to those of my teachers, and to disciples bound by a stipulation and oath, according to the law of medicine, but to none others.

I will follow that method of treatment which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked, nor suggest any such counsel; furthermore, I will not give to a woman an instrument to produce abortion.

With purity and with holiness I will pass my life and practice my art. I will not cut a person who is suffering with a stone, but will leave this to be done by practitioners of this work. Into whatever houses I enter I will go into them for the benefit of the sick and will abstain from every voluntary act of mischief and corruption; and further from the seduction of females or males, bond or free.

Whatever, in connection with my professional practice or not in connection with it, I may see or hear in the lives of men which ought not to be spoken abroad, I will not divulge, as reckoning that all such should be kept secret.

While I continue to keep this oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men at all times, but should I trespass and violate this oath, may the reverse be my lot.

are bound to measure their physicians in accordance with the standards they believe to be adequate."

Thus the physician is no longer accepted as a healer "endowed with divine guidance, but an interpreter of the publicized progress of science."

Old age advances. In 1900, only slightly more than three million Americans were over 65 years old. Today, this group exceeds 14 million; in 1975 it will exceed 20 million—almost ten per cent of the population.

"Our ability to keep our patients alive beyond the biblical span has created profoundly disturbing problems which could not have been foreseen by Hippocrates."

All of these things force us to reassess our professional commitments. But Dr. Samter rejects a return to the past. The way out is not by nostalgia; no regrets will recapture the past.

In this respect Dr. Samter notes that some of the schools which no longer administer the Hippocratic Oath have returned to specific commitments which outline the responsibilities of physicians with care and detail. Some have returned to the Creed of Maimonides, which prays for strength: "Let me see in the sufferer the man alone"—the last and final test of competence and integrity. The New Oath of the Hebrew physician commits the doctor "in simple and beautiful terms to the custody of the sick, to understanding and compassion, to truth and to wisdom."

But there is a new oath of the American physician yet to be written, Dr. Samter says. When it is, it will be founded on our Hippocratic heritage. It will recognize the oneness of the world, for better or for worse, and accept the certainty that the world will be remade by our technological revolution.

"It will differ from the covenants of the past. The profound appeal of technology has convinced society that physicians are the instruments of technology; that tests, computors, automatic controls will replace our fragile minds; that teletype and telephone are essential means of communication between physicians and patients.

"It is my firm belief that we need a covenant between ourselves to return, in our time of technological confusions, to some of the values which are the inheritance of the past and which should be carried into the future." ■

Lilly

relief from moderate postoperative pain

DARVON® COMPOUND



Usual dosage:
1 or 2 Pulvules® three or four times daily.

Also available:
Darvon Compound-65.

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)

120232

for acute

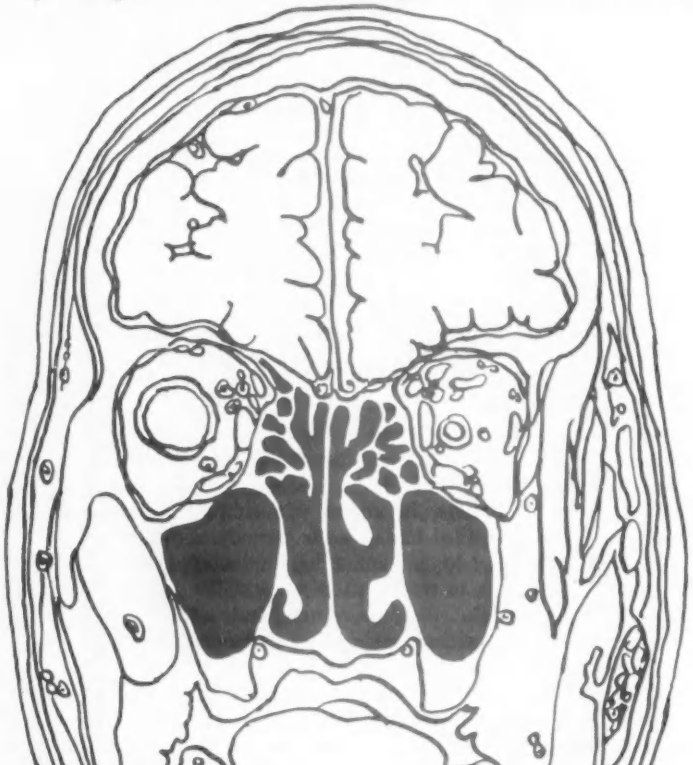
upper respiratory infections

Tetrex® capsules

The Original Tetracycline Phosphate Complex

U.S. PAT. NO. 2,791,609

effective control of pathogens...with an unsurpassed record of safety and tolerance



SUPPLY: TETREX Capsules–tetracycline phosphate complex–each equivalent to 250 mg. tetracycline HCl activity. Bottles of 16 and 100.

TETREX Syrup–tetracycline (ammonium polyphosphate buffered) syrup–equivalent to 125 mg. tetracycline HCl activity per 5 ml. teaspoonful. Bottles of 2 fl. oz. and 1 pint.

BRISTOL LABORATORIES, SYRACUSE, NEW YORK

Div. of Bristol-Myers Co.

BRISTOL ™



BLOOD SAMPLE yields isozymes which Dr.Wroblewski finds are signposts of disease.

ISOZYMES—NEW WORD, NEW DIAGNOSTIC CONCEPT

Electrophoresis of blood picks out typical patterns stamped by diseased tissue

A new word and a new concept are being introduced into clinical diagnosis.

The word: isozymes. The concept: Certain enzymes consist of several forms occuring in proportions that are specific for each kind of tissue. When the tissue is diseased, the pattern is "stamped" on the blood and can be identified by physico-chemical analysis, particularly by electrophoresis.

Studies so far have shown that the new technique for separating isozymes can distinguish clearly between diseases of the heart, liver, muscle, kidney and pancreas. It can also pinpoint alkaline phosphatase from liver and from bone, thus aiding in diagnosis of diseases involving this enzyme.

A chief architect of the new idea is Dr. Felix Wroblewski of Sloan-Kettering Institute, Memorial Hospital and Cornell University Medical College, New York. Previously, Dr. Wroblewski had discovered that altered enzyme patterns in the plasma are diagnostically significant in myocardial infarction (MWN, June 3, 1960). At a New York Academy of Sciences meeting he reported extension of the method to other tissues.

"The standard enzyme tests lack specificity," he said. "With isozymes, however, we move from gross chemistry to microscopic detail, and thus have a new frontier waiting to be explored. The new tests and other findings represent one of the most important developments in diagnostic medicine in recent times."

Basic to the new approach is the discovery that many enzymes are not single entities. Dr. Wroblewski conducted electrophoretic studies of plasma and tissue specimens from 150 normal people, 200 patients with diseases of various types and 400 cadavers. Data from the biopsy and autopsy studies corresponded, tissue for tissue, in all cases. They showed that plasma, liver, heart, skeletal muscle, kidney and pancreas contain up to *five* forms of lactic acid dehydrogenase (LDH). [Lacking a standard nomenclature, U.S. enzymologists identify the isozymes of LDH in order of increasing mobility in an electric field—LDH_1 (slowest) to LDH_5.]

Further studies showed their patterns of concentration in tissue. Liver has three isozymes, with a high percentage of LDH_1 and less of LDH_2 and LDH_3. Skeletal muscle has five, with a high percentage of LDH_1, as well as elevated values for LDH_{2-5}. Heart muscle has a predominance of LDH_5, the pancreas of LDH_3 and LDH_5, and the kidney of LDH_{3-5}. Plasma has all five isozymes in about equal proportions.

Thus, tissue can be identified enzymatically even if there is no recognizable structure, as in homogenate, Dr. Wroblewski points out.

CONTINUED ON PAGE 34

Lilly

relieves the persistent pain of arthritis

DARVON® COMPOUND



Usual dosage:
1 or 2 Pulvules® three or four times daily.

Also available:
Darvon Compound-65.

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)

120232

ISOZYMES CONTINUED

"Once I make sure that the enzyme is LDH, all I have to do is look at the distribution of the isozymes in the electrophoretic apparatus to know which tissue they come from."

The clinical application of these separations stems from the fact that a sick person's blood carries the typical isozyme pattern of his disease. Biopsy and autopsy studies enabled the Sloan-Kettering enzymologist to define each of these patterns. For instance, the presence of LDH_5 in abnormal amounts signals heart disease; an excess of LDH_1, liver disease.

Two methods can be used for these measurements: zone electrophoresis on starch gel, or simple heating of the plasma sample. The first method, while more precise, is cumbersome and time consuming, requiring up to 18 hours per sample. Simple heating, which would be better for routine clinical use, is now being evaluated. So far it has been tried on plasma samples from 90 patients, giving "an excellent correlation with electrophoresis," according to Dr. Wroblewski.

Another diagnostically useful enzyme, transaminase, is now under study; it, too, has more components than previously thought, he says.

Diagnosis Before Symptoms

Electrophoretic studies of plasma samples from five normal persons and 25 patients with cancer, liver or heart disease indicate that glutamic oxalacetic transaminase has three isozymes and glutamic pyruvic transaminase, two. The Sloan-Kettering researcher hopes these findings will eventually sharpen present transaminase tests.

Confirmation of Dr. Wroblewski's studies on LDH came during the conference from a Belgian physician who uses a slightly different technique. Dr. Roger H. Wieme, head of the laboratory of the Medical Center, University of Ghent, said his one-hour electrophoretic method of separating the LDH isozymes also enables the physician to make or confirm a diagnosis of liver and heart disease.

Analyzing only .001 ml of serum from each of 2,000 persons, he and co-worker, Dr. Yvon Van Maercke, found that their technique revealed liver disease in 1,000 of them and myocardial infarction in 300.

"Sometimes we can make a diagnosis before the patient breaks out in an acute condition," Dr. Wieme notes. "One of my colleagues had severe retrosternal pain, and a clinical diagnosis of myocardial infarction was made. We decided to run our LDH test and found evidence not only of the infarction, but of incipient liver disease. Two days later, he came down with acute hepatitis."

In preliminary studies, alkaline phosphatase (AP) from liver and bone also have been cleanly separated by starch gel electrophoresis, according to Dr. O. Dhodanand Kowlessar, of New York Hospital-Cornell Medical Center.

Cirrhosis or Pregnancy?

"Their resolution on starch gel is beautiful," he says; in the more than 100 cases tested so far each AP reveals a characteristic and readily identifiable migration pattern.

Plotting the data on a graph, he always finds two peaks, one for liver and the other for bone, which vary in size according to the disease. In normal adults the peaks are low. But an abnormal rise in the liver peak reflects hepato-biliary disorders, he declares, and is seen in patients with Laennec's cirrhosis, infiltrative diseases of the liver, biliary cirrhosis and biliary obstruction secondary to choledolithiasis or carcinoma, or both.

In patients with Paget's disease and osteomalacia secondary to malabsorption, he finds a conspicuous rise in the bone peak.

An elevated bone AP also reflects pregnancy, Dr. Kowlessar points out. He attributes the apparent increase in the mother's bone AP to fetal bone growth. If the same woman happens to have liver disease, both peaks are elevated on the graph.

Dr. Kowlessar is also investigating new aspects of another enzyme that has been employed diagnostically — leucine aminopeptidase (LAP). Useing the starch gel technique to analyze serum from more than 150 persons, he finds that normal subjects produce a single LAP peak, while disease states produce two or three peaks, depending on the disease.

The sensitivity of this method in detecting the varieties of LAP can be useful as well in making a diagnosis of pregnancy, he finds. Where the real thing has occurred, there are two LAP peaks, but in pseudo-pregnancy, there is just one. ■

MEDICINE'S ART

Dr. Edward Annis practices what he preaches about a citizen's responsibilities

In 1933, a professor at Marquette University's School of Medicine wanted to flunk an eager freshman. His reason: The student insisted on combining his medical studies with a heavy schedule on the university debating team.

On appeal to school authorities the young student quoted the advice of a Jesuit teacher during his undergraduate days at the University of Detroit. "All educated men owe a responsibility to government. No matter what we do in life, at least some of our efforts should be devoted to defining and improving the American system of government."

The eloquent young man asked the Marquette officials: "How can a man be active in public affairs if he doesn't keep exercising the means of action?"

Still on the Platform

The authorities were impressed with Edward R. Annis' logic, and today, at 47, Dr. Annis, a practicing surgeon in Miami, Fla., is still debating, fulfilling what he considers his responsibility to the American system.

As unofficial spokesman for the nation's doctors on the question of national health insurance, he has faced on TV such articulate speakers as Sen. Hubert Humphrey (D-Minn.) and Walter Reuther, president of the United Auto Workers. On one occasion, he ably debated with two Senators at once—Jacob Javits (R-N.Y.) and William Proxmire (D-Wis.).

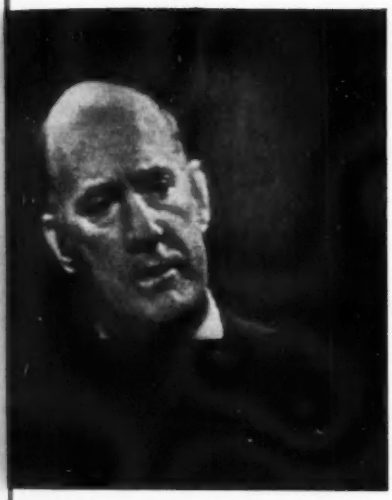
Dr. Annis holds no office in the AMA, and is obviously a physician first and a debater second. He may be the answer to the paradoxical remark: "I don't like organized medicine, yet all the doctors I know personally are wonderful people." Not an organization man, Dr. Annis is the individual doctor who commands respect and trust.

His speaking campaign against socialized medicine began years ago, but

ARTICULATE SPOKESMAN

he first appeared on the national scene in December, 1959. As chairman of the Florida Medical Association's legislative committee, he was speaking in opposition to medical care through Social Security at a Senate subcommittee hearing on problems of the aged. He became engaged in an impromptu debate with Averell Harriman, former Governor of New York, and now President Kennedy's roving ambassador.

Dayton Moore, associate editor for media relations for the AMA, was at the Miami hearing. He was so impressed with Dr. Annis' skill that he promptly signed him up for the



DR. ANNIS is medicine's new TV star.

AMA's speaker bureau. He's been on the "stump" ever since.

Always a busy man—it has been ten years since he has had dinner with his family, except on Sundays—he has found it possible to become busier. A typical day might find him performing an abdomino-perineal resection in the morning, consultation with patients in the afternoon, a medical meeting and a check on his hospital patients in the evening, finally getting home in time for a few hour's sleep before catching a jet for a speaking engagement.

"My partner and my associates meet professional needs when I'm away," he says. "And I work nights and weekends when I need to catch up."

A family tradition also helps. Breakfast is served at 6:30 so he can be with his wife and eight children for at least one meal a day. The children, four boys and four girls, range in age from 2½ to 18.

None of them, as yet, is planning a medical career. "I would like to have one of my boys be a doctor," says Dr. Annis, "but I'm not going to push any of them into it. That is something you have to want to do yourself."

This leads him to comment on the status of medicine. "The trouble is that my boys have seen what medicine is like. They've seen that doctors aren't appreciated anymore, that they are pictured as greedy people."

Behind this picture, he sees the need for doctors to learn to communicate.

"I think, in fact, that all professions and businesses should develop spokesmen to report to the people on what they're doing and why they're doing it. If the American people knew the true story of the great progress of medicine, they would be proud of it, as we are."

'Not Closing My Mind'

His own skill at putting across this story has led some of his listeners to speculate that he might want to make a career as a speaker. He has already been compared to Joseph Welch, the lawyer whose performances at the Army-McCarthy hearings earned him movie and television roles.

"I enjoy practicing medicine," says Dr. Annis. "I can't conceive of doing anything else. And I can't see being away from medicine indefinitely. But with eight children to clothe and feed, I'm not closing my mind to anything. . . ."

In the meantime, both the volume and content of his mail attest to his television appeal. He gets letters from older folks who are living on Social Security but are opposed to legislation like the Forand bill, messages from doctors advising him on points to watch in his next TV debate, and notes from old friends and relatives he hasn't heard from since boyhood.

Through most of them runs a common viewpoint: They are addressing not the AMA, but somebody's family doctor. And, characteristically, Dr. Annis answers every single letter he receives. ■

Lilly

relief from the acute pain of trauma

DARVON® COMPOUND



Usual dosage:
1 or 2 Pulvules® three or four times daily.

Also available:
Darvon Compound-65.

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)

120232

INTERNS' FEES CALLED 'FIXED'

AMA official charges many hospital administrators across the country work together to keep intern stipends at depressed levels. And he names thirty-five cities as evidence

There is more than enough evidence, an AMA official declares, to prove that many hospital administrators conspire to fix "prices" on intern stipends in their cities.

The accuser is Dr. Ralph E. Adams, assistant secretary of the AMA's Council on Medical Education and Hospitals. He laid his accusations before the Association's 1961 Congress on Medical Education and Licensure. Dr. Adams wasted no time on generalities:

"Just look at the record. You'll see enough price uniformity over a period of years to be able to identify at least 65 hospitals engaged in collusive pricing practices. This fiscal togetherness puts 7.5 per cent of the country's 856 intern hospitals in the price-fixing category."

To support his charge, Dr. Adams has compiled a list of 35 cities in which all hospitals with approved programs have published identical intern stipends for three years or more.

The list shows, for example, that the intern-approved hospitals in Elizabeth, N. J., maintained the same stipends for seven years in a row—1950 through 1956. So did the hospitals with approved internships on Staten Island, N. Y., beginning in 1951. And in Syracuse, N. Y., the city's five intern-approved hospitals paid identical stipends for six years running.

Abuse Called Widespread

"I'd say hospitals in at least 100 cities are in some way suspect," Dr. Adams charges. "Collusive pricing at one time or another may involve as many as one-fourth of all U.S. intern hospitals."

The AMA official is also concerned by what he calls "internal" price-fixing. This is a double-standard arrangement that pays one amount to married interns and another, always less, to single interns. "It's an obvious kind of salary discrimination," says Dr. Adams. "And something else. Doesn't this system prove that some hospitals are paying less than they can *afford* to pay? A good many interns think it does."

Dr. Adams acknowledges that financial benefit certainly isn't the only thing an intern looks for in postgraduate training. He notes that the most successful hospitals in the market—those that fill their quotas year in and year out—in many cases offer the very lowest stipends. The reason: "They offer an educational return that appears to be more desirable than a higher salary." But not all hospitals, of course, offer the same "educational return." Dr. Adams believes that as time goes on, stipends will become increasingly important to America's interns.

"Today's price-fixing sets a bad precedent for the future. It throws the intern into a market in which, to some degree, he can be exploited by the hospital."

Not All Are Guilty

It's not yet universal exploitation, however. Dr. Adams says some "truly competitive intern markets" do exist—usually in the big cities.

"It's just that common pricing policies become more and more difficult as the number of hospitals increases. So the big cities with many internships to offer frequently present an honestly competitive picture. Take the 35 intern-approved hospitals in Chicago, for example. Back in 1949, the lowest stipend offered in Chicago was $14 a month, the highest was $88. But by 1960, the spread went from a low of $80 to a high of $263."

Until there's more widespread competition in the intern market, however, Dr. Adams sees the intern as the innocent victim of circumstance:

"So long as some hospitals show an apparent preference for collusive and discriminatory behavior over purely competitive behavior, we might be justified in raising some question about the confidence these hospitals have in the quality of their educational programs." ■

CITIES IN WHICH ALL HOSPITALS PAID ALL INTERNS IDENTICAL MONTHLY STIPENDS

CITY	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Tucson, Ariz.	$ —*	$ —*	$100	$100	$ —	$ —*	$100	$100	$100	$150	$150	$150
Oakland, Calif.	—	75	75	75	75	—	100	—	—	—	—	—
Santa Monica, Calif.	50	50	50	—	125	125	125	—	—	—	—	—
Bridgeport, Conn.	—	100	100	100	100	—	—	—	—	—	—	—
Waterbury, Conn.	75	—	—	—	100	200	200	200	200	200	200	200
Wilmington, Del.	—	—	100	100	150	150	150	150	—	190	190	190
Rockford, Ill.	—	—	—	—	—	150	150	150	150	150	150	—
Ft. Wayne, Ind.	—	—	—	—	—	—	200	200	200	250	250	—
Gary, Ind.	—	—	—	150	150	150	—	—	—	250	250	250
South Bend, Ind.	100	100	—	—	—	—	—	—	250	250	—	—
Cedar Rapids, Iowa	—	100	100	—	—	—	—	—	—	250	250	250
Cambridge, Mass.	—	—	—	—	100	100	100	100	—	—	—	—
Grand Rapids, Mich.	—	—	—	—	—	—	200	200	—	250	—	275
Duluth, Minn.	25	25	—	—	75	75	75	75	—	—	—	150
Butte, Mont.	—	—	—	—	—	—	—	150	150	150	—	—
Camden, N. J.	—	—	—	—	—	—	—	—	—	200	200	—
Elizabeth, N. J.	—	100	100	100	100	100	100	100	—	—	—	—
Passaic, N. J.	—	—	—	—	75	—	—	100	—	100	100	100
Poughkeepsie, N. Y.	—	—	—	—	—	—	200	—	200	—	200	200
Staten Island, N. Y.	100	—	100	100	100	100	100	100	100	—	—	—
Syracuse, N. Y.	—	—	100	125	—	166	166	167	—	—	208	—
Yonkers, N. Y.	—	100	100	100	100	100	100	—	—	—	—	—
Charlotte, N. C.	—	—	50	100	100	—	—	200	—	—	—	—
Fargo, N. Dak.	—	—	—	150	150	150	150	—	175	225	225	225
Akron, Ohio	—	—	—	—	200	200	200	200	200	200	200	—
Springfield, Ohio	—	—	—	175	175	175	175	175	—	250	250	—
Allentown, Pa.	75	75	75	—	—	200	200	200	200	200	200	225
Wilkes-Barre, Pa.	50	50	—	—	—	—	—	—	—	—	—	300
Williamsport, Pa.	—	—	—	—	200	200	200	200	200	—	—	—
Sioux Falls, S. Dak.	—	100	—	—	—	—	150	150	150	150	—	150
Temple, Tex.	—	—	—	—	150	—	150	150	—	—	—	—
Charleston, W. Va.	100	100	—	—	—	—	—	200	—	—	—	200
Parkersburg, W. Va.	—	—	—	150	—	—	150	150	150	150	150	150
Wheeling, W. Va.	100	100	100	—	—	—	—	250	—	250	250	250
La Crosse, Wis.	—	—	100	—	200	200	—	200	200	200	—	—

* (—) Indicates intern pay varied among hospitals in years marked.

FEWER INJECTIONS FOR HAY FEVER PATIENTS

Clinical trials show new ragweed preparations give protection with one to six shots

One of the dreams of allergy researchers is to find the ideal allergen which will safely desensitize patients in a single all-powerful shot. The dream remains unrealized, but significant progress is being made.

At the American Academy of Allergy meeting in Washington, two teams of investigators reported on a highly promising new ragweed complex which matches the performance of conventional extracts but requires only one-fourth as many injections. And a massive collaborative study, involving 2,000 patients, indicated that repository ragweed therapy with a slow-acting emulsion could produce good results after only one dose.

Dr. Louis Mamelok of Brooklyn and G. Everett Gaillard of White Plains, N. Y., reported on the effectiveness and safety of the new alum-precipitated pyridine-ragweed complex *Allpyral* in more than 800 patients suffering from a variety of different hay fevers.

"The alum-precipitated pyridine complex material," said Dr. Gaillard, "is simple, safe, effective, and requires only one-third to one-quarter as many injections as does the aqueous material for an equal or superior result."

Moreover, he noted that it can be used "without special training or special equipment by any physician now using aqueous allergenic extracts."

The high safety factor of *Allpyral* was revealed in a series of 666 cases in which there were only 16 systemic reactions. Two of these were caused by improperly prepared material and the other 14 by overdosage, he said.

The number of injections required for adequate protection is also remarkably small—between six and eight during the initial season. During succeeding years, no more than four to six injections per season are needed.

In his series of cases (tree, grass, and ragweed hay fever), Dr. Gaillard obtained excellent results in 70 per cent, good results in 19 per cent, moderate results in eight per cent, and poor results in only three per cent. In 86 patients with pollen asthma, with or without hay fever, 86 per cent had an excellent response, ten per cent a good response, and four per cent a poor-to-moderate response. Dr. Gaillard also called the results in the pollen asthma group "outstanding."

Dr. Mamelok reported similar findings: excellent or good results in 81 of 87 patients treated preseasonally with *Allpyral* extract. Twenty-two patients, who previously needed antihistamines along with their injections, did not require them with the new complex, "even though the dosages were increased many fold."

Ragweed Therapy Study

The massive collaborative study of the other new technique—repository ragweed therapy—was reported by study committee chairman Samuel M. Feinberg of Chicago. The therapy, he explained, is based on the Freund adjuvant principle that allergens can be greatly enhanced when given with oil emulsion bases. To check this, the American Academy of Allergy enlisted investigators in 30 cities; they studied 1,577 patients and 200 controls.

Of 1,472 hay fever patients, 39 per cent obtained marked relief, ten per cent complete relief, and 25 per cent moderate relief. The 200 placebo-treated patients showed somewhat poorer results: 23 per cent marked relief, 15 per cent moderate relief. Among 740 treated asthma patients, 33 per cent obtained marked relief, 23 per cent complete relief, and 21 per cent moderate relief. Here the figures were much poorer among controls.

Systemic reactions occurred in 6.5 per cent of the pollen-treated cases, most of them mild.

Despite the low reaction rates, the general feeling of the investigators was that it is still too soon to tell how safe and effective the repository technique will be. They are worried, among other things, about the possibility of triggering new allergies with the emulsion, which is an extremely efficient inducer of antibody protection. They also favor caution because the method requires extreme care and skill. More study, in short, is indicated. ■

Lilly

relief from pain, fever, and inflammation

DARVON® COMPOUND



Usual dosage:
1 or 2 Pulvules® three or four times daily.

Also available:
Darvon Compound-65.

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)

120232

extends the usefulness of Vitamin K_1 therapy†...

NEW Injection

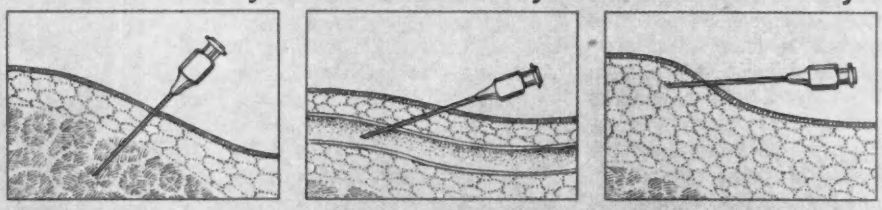
AquaM

AQUEOUS COLLOIDAL SOLUTION

OF

†a clear, stable, aqueous colloidal solution for administration

• intramuscularly • intravenously • subcutaneously



a dosage form for every Vitamin K indication:

AquaMEPHYTON (for intramuscular, intravenous, subcutaneous administration), 1-cc. ampuls containing 10 mg. MEPHYTON, Vitamin K_1

TABLETS MEPHYTON (for oral administration), 5 mg.

EMULSION MEPHYTON (for intravenous administration only), 1-cc. ampuls containing 10 mg. and 50 mg. per cc.

MEPHYTON®

OF MEPHYTON®, VITAMIN K_1

Vitamin K_1 "has a more prompt, more potent and more prolonged effect than the vitamin K analogues" *

*Council on Drugs: New and Nonofficial Drugs, Philadelphia, J. B. Lippincott Co., 1960, p. 732

reduces the hazard of hemorrhage due to hypoprothrombinemia in:

- prophylaxis and therapy of hemorrhagic disease of the newborn
- surgery, preoperatively and postoperatively
- anticoagulant-induced prothrombin deficiency
- inadequate absorption of Vitamin K
- biliary tract disease
- prothrombin-depressing drugs such as salicylates and phenylbutazone
- inadequate endogenous production of Vitamin K

For additional information, write Professional Services, Merck Sharp & Dohme, West Point, Pa.

MERCK SHARP & DOHME
DIVISION OF MERCK & CO., INC., WEST POINT, PA.

AquaMEPHYTON AND MEPHYTON ARE TRADEMARKS OF MERCK & CO., Inc.

Scissors & Scalpel

STRAPLESS GOWNS

There were no celebrities, no buyers, no fashion reporters, when Lenox Hill Hospital in New York City showed its new collection this year, but a lot of people will be enthusiastic over the designs nonetheless.

A nurse at the hospital has designed what patients and staff have come to regard as a contradiction in terms—an attractive hospital gown.

Compared with the old, rough-textured, draughty, scratchy affairs, the new model is of soft percale, which is less apt to shrink. Sleeves are shorter and wider, allowing shots to be given in the upper arm without having to take the gown off. It is fitted with snaps down the front instead of ties up the back. But most satisfying of all to the downhearted patient, the gown comes in blue, turquoise and yellow.

SIC, SIC, SIC

Yet another use for that handy vessel, the kidney bowl—a mail order establishment is advertising them as a "Deep Dish Snack Set."

"Used by the medical profession as an emesis basin," the advertisement unashamedly runs, "these charming kidney-shaped dishes can be adapted to all kinds of clever uses.

"Pleasant to look at, they can be used to hold nuts, pretzels, candies, etc. Makes a handsome bar and party dish for children and grownups. Can be used for individual servings of salads and other foods. . . . Choice of colors: grey, green, or black, three for $2.00."

RACING TIP

Dr. Stanley O. Wilkins, physician at a New Jersey race track, offers a tip straight from the horse's mouth—if you have a heart ailment stay away from the races.

Dr. Wilkins sees an average of four deaths a season from heart attacks. One year twelve persons died, most of them known cardiac cases. "Racing fans are a strange breed," says the track physician, "they have an amazing disregard for their own afflictions and they're sometimes fatal."

He recalled one case, an inveterate horseplayer who had retired from his job because of a heart ailment. "His wife pleaded with him to stay home," said Dr. Wilkins, "but he came to the track anyway, saying he'd rather die here than any place. And he did."

PECK BY PECK

It's not just the fat in the diet that raises the cholesterol levels, it's those three square meals a day.

This is the conclusion of three Chicago investigators who compared groups of nibbling chickens with groups of dinner-eating chickens. The nibblers were allowed free access to food 24 hours a day. Meal eaters were given the same food, but only for one hour, two or three times a day.

The chickens fed meals showed double the serum cholesterol levels and seven times the severity of coronary atherosclerosis as the chickens permitted to eat peck by peck, report Drs. Clarence Cohn, Ruth Pick and Louis N. Katz of Michael Reese Hospital.

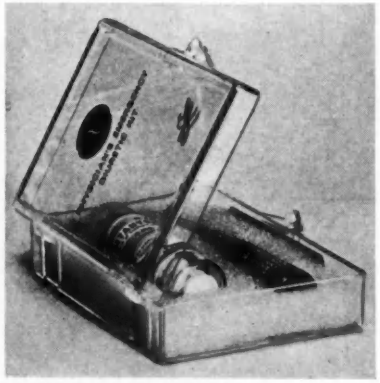
Pointing out in *Circulation Research* that civilized man has by habit, custom and working conditions become a meal eater, the Chicago team adds that if man reacts physiologically to meal eating and nibbling as do the chickens, then one factor in the onset of human atherosclerosis might well be his eating habits.

Product News

NEW ANTIHISTAMINE

Forhistal (CIBA) is dimethypyrindene maleate, an antihistamine which has proved effective in a broad range of allergies, including the common respiratory allergies, seasonal, perennial and vasomotor rhinitis; ocular allergies, especially those accompanying hay fever; and allergic and pruritic dermatoses. *Forhistal's* principal side effect is drowsiness.

Forhistal is supplied in four dosage forms: *Lontabs,* containing 2.5 mg dimethypyrindene and effective for approximately 12 hours; tablets containing 1 mg; syrup containing 1 mg per 5 ml teaspoon; and pediatric solution with calibrated dropper containing 0.5 mg per 0.6 ml. For best therapeutic response, dosage and dosage form must be adjusted to individual requirements. Usual adult dosage is 4 to 8 mg daily. Dosage in children under six is 0.3 to 0.6 ml pediatric solution two or three times daily.



FOR EMERGENCIES

Emergency Diuretic Kit (Lakeside) containing an ampule of *Mercuhydrin Sodium* and a vial of *Metahydrin* tablets for treatment of congestive heart failure and severe edema, as well as package inserts for the two drugs, is being sent free to physicians. Refills, also free, can be ordered from Lakeside as long as the supply lasts.

ANTI-INFLAMMATORY AGENT

Tandearil (Geigy) is a potent, nonhormonal anti-inflammatory agent, oxyphenbutazone, indicated in rheumatoid arthritis, rheumatoid spondylitis, psoriatic arthritis, osteoarthritis, gout, painful shoulder conditions such as bursitis and capsulitis, superficial thrombophlebitis and severe forms of a variety of local inflammatory conditions.

Most common side effects include nausea, edema and drug rash. If mild, these can be minimized by reducing dosage. If severe, treatment should be stopped. Contraindicated in systemic edema and in cases in which there is danger of cardiac decompensation, in patients with peptic ulcer, renal or cardiac damage, drug allergy or blood dyscrasia.

Dosage depends on condition being treated. *Tandearil* is supplied as tablets containing 100 mg oxyphenbutazone.



an added measure of protection for little patients

against relapse
against "problem" pathogens

DECLOMYCIN®

DEMETHYLCHLORTETRACYCLINE LEDERLE

pediatric drops
syrup

● full antibiotic activity ● lower milligram intake per dose ● up to 6 days' activity with 4 days' dosage ● uniformly high, sustained peak activity ■ **syrup** (cherry-flavored), 75 mg./5 cc. tsp., bottles of 2 and 16 fl. oz. Dosage: 3 to 6 mg./lb./day—in four divided doses. **pediatric drops,** 60 mg./cc., 3 mg./drop, 10 cc. bottles with calibrated dropper. Dosage: 1 to 2 drops/lb./day—in four divided doses.

PRECAUTIONS: As with many other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs discontinue medication. Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under observation.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York



Lifts depression...as it calms anxiety!

Smooth, balanced action lifts depression as it calms anxiety...rapidly and safely

Balances the mood – no "seesaw" effect of amphetamine-barbiturates and energizers. While amphetamines and energizers may stimulate the patient – *they often aggravate anxiety and tension.*

And although amphetamine-barbiturate combinations may counteract excessive stimulation – *they often deepen depression.*

In contrast to such "seesaw" effects, Deprol's smooth, *balanced* action lifts depression as it calms anxiety – both at the same time.

Acts swiftly – the patient often feels better, sleeps better, within a few days. Unlike the delayed action of most other antidepressant drugs, which may take two to six weeks to bring results, Deprol relieves the patient quickly – often within a few days. Thus, the expense to the patient of long-term drug therapy can be avoided.

Acts safely – no danger of liver damage. Deprol does not produce liver damage, hypotension, psychotic reactions or changes in sexual function – frequently reported with other antidepressant drugs.

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate. **Supplied:** Bottles of 50 light-pink, scored tablets. Write for literature and samples.

▲Deprol▲®

WALLACE LABORATORIES / *Cranbury, N. J.*

60-3125





DOCTOR'S BUSINESS

Treasury officials are strongly resisting pressure for changes in income tax laws involving professional partnerships—including those of doctors. A proposal now before Congress would permit partners to deduct from their tax returns money set aside for personal pension benefits. This is prohibited under present Internal Revenue regulations, and Treasury officials don't favor a change.

Many gifted young men are lured away from medicine by higher-paying jobs in other scientific fields. That's the implication of a survey of 61 undergraduate schools. The College Placement Council reports that college seniors heading for scientific careers are getting offers of $15 to $20 a month more than graduates last year. Average starting pay is $543 a month for a man with a bachelor's degree who goes into a technical vocation. Electrical engineering pays the best ($552 a month) while jobs in aeronautical engineering, physical sciences, chemical and mechanical engineering pay almost as much. Educators say there's no doubt that hundreds of these scientifically outstanding graduates would have been among those who chose medicine as a career a few years ago.

A new Government pamphlet aids doctors in advising their patients on the best way to keep healthy while travelling abroad. Titled "So You're Going Abroad—Health Hints for Travelers," it was prepared by the U.S. Public Health Service and costs five cents from the Superintendent of Documents, Washington 25, D.C. It offers advice on personal diet, sanitation and other disease-preventing cautions.

Four bills to extend Social Security coverage to self-employed physicians have already been introduced in the current session of Congress. They've all been referred to the House Ways and Means Committee; no hearings scheduled to date.

State taxes will probably go up in the near future. Forty-seven of the 50 state legislatures are scheduled to meet this year, and tax increases are the common theme of legislatures already in session. West Virginia has just raised its sales tax. Pennsylvania is aiming for higher gasoline taxes. Illinois wants to boost sales taxes and Connecticut taxpayers have been told they face the biggest tax increases in that state's history. Similar increases elsewhere may make 1961 one of the biggest years for increased state taxes.

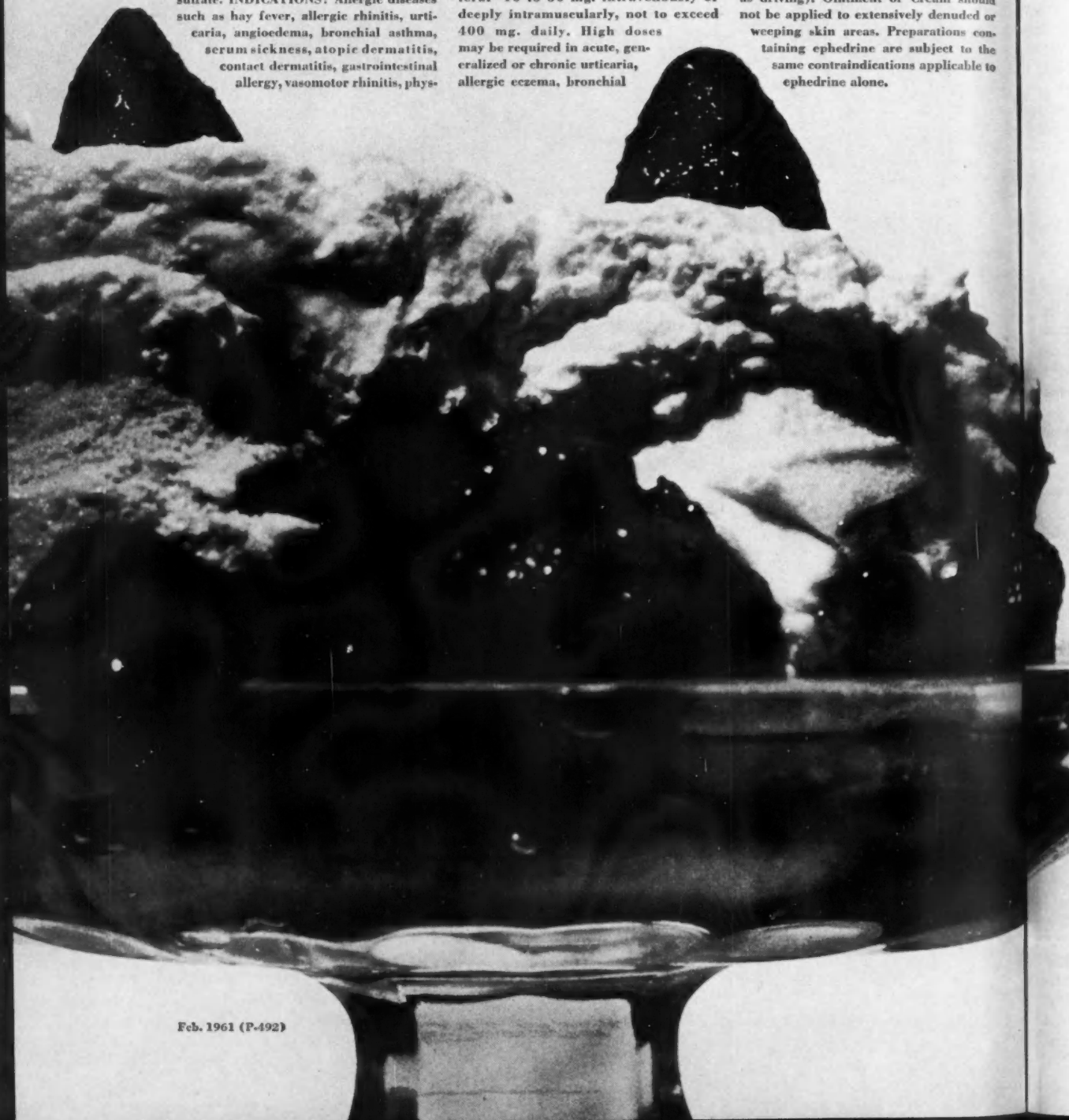
Spot check by the Government reveals that 31 per cent of U.S. taxpayers failed to report all dividend income and 23 per cent neglected to list all income from interest payments. As a result, the Internal Revenue Service will continue its "concerted drive to close the dividend and interest gap between the amounts paid out and the amounts reported on Federal returns."

The Treasury Department's newly appointed chief on tax matters is widely regarded as a tough policy-maker. Prof. Stanley Surrey (Harvard Law School) helped draft a program of tax reform for President Kennedy. Though the report has never been made public, it includes proposals for higher taxes on dividend and interest income, capital gains and retirement income. Surrey also favors doing away with tax exemptions for interest on state and municipal bonds.

The AMA is issuing a booklet that will answer patients' questions about current medical costs. In an easy-to-read colloquial style, it makes these points: Americans spend only six cents of every dollar for health care; doctor's fees have risen far less than the cost of food, clothing, movies; more than 72 per cent of the total population—and 49 per cent of those over 65—pay for their health care through voluntary health insurance. Copies of the booklet are available to physicians through state and county medical societies.

Tax authorities say refresher courses and ocean voyages don't mix. A doctor who claimed a deduction for partial expenses of a Mediterranean cruise because he was taking a medical brush-up course on board ship lost an appeal to U.S. Tax Court. The judge ruled that the doctor was primarily taking a vacation—not learning. The course was given by lecturers from Duke University School of Medicine. Duke received no fees for the course and the lecturers were working for free passage on the cruise.

BENADRYL Hydrochloride (diphenhydramine hydrochloride, Parke-Davis). Kapseals® of 50 mg.; Capsules of 25 mg.; Emplets® (enteric-coated tablets) of 50 mg.; in aqueous solutions: 1-cc. Ampoules, 50 mg. per cc.; 10- and 30-cc. Steri-Vials,® 10 mg. per cc. with 1:10,000 benzethonium chloride as a germicidal agent; Elixir, 10 mg. per 4 cc.; 2% Ointment (water-miscible base); Kapseals of 50 mg. BENADRYL HCl with 25 mg. ephedrine sulfate. INDICATIONS: Allergic diseases such as hay fever, allergic rhinitis, urticaria, angioedema, bronchial asthma, serum sickness, atopic dermatitis, contact dermatitis, gastrointestinal allergy, vasomotor rhinitis, physical allergies, and allergic transfusion reactions, also postoperative nausea and vomiting, motion sickness, parkinsonism, and quieting emotionally disturbed children. Parenteral administration is indicated where, in the judgment of the physician, prompt action is necessary and oral therapy would be inadequate. DOSAGE: Oral—adults, 25 to 50 mg. three or four times daily. Children, 1 or 2 teaspoonfuls of Elixir three or four times daily. Parenteral—10 to 50 mg. intravenously or deeply intramuscularly, not to exceed 400 mg. daily. High doses may be required in acute, generalized or chronic urticaria, allergic eczema, bronchial asthma, and status asthmaticus. PRECAUTION: Avoid subcutaneous or perivascular injection. Single parenteral dosage greater than 100 mg. should be avoided, particularly in hypertension and cardiac disease. Products containing BENADRYL should be used cautiously with hypnotics or other sedatives; if atropine-like effects are undesirable; or if the patient engages in activities requiring alertness or rapid, accurate response (such as driving). Ointment or Cream should not be applied to extensively denuded or weeping skin areas. Preparations containing ephedrine are subject to the same contraindications applicable to ephedrine alone.



Feb. 1961 (P-492)

when allergy looms large in the life of your patient...

relieves the symptoms of food allergy When the allergic patient can't resist eating an offending food, the ensuing punishment is often out of all proportion to the nature of the "crime." In such cases, BENADRYL provides a twofold therapeutic approach to the management of distressing symptoms.

antihistaminic action A potent histamine antagonist, BENADRYL breaks the cycle of allergic response, thereby relieving gastrointestinal upset, urticaria, edema, pruritus, and coryza.

antispasmodic action Because of its inherent atropine-like properties, BENADRYL affords concurrent relief of gastrointestinal spasm, abdominal pain, nausea, and vomiting.

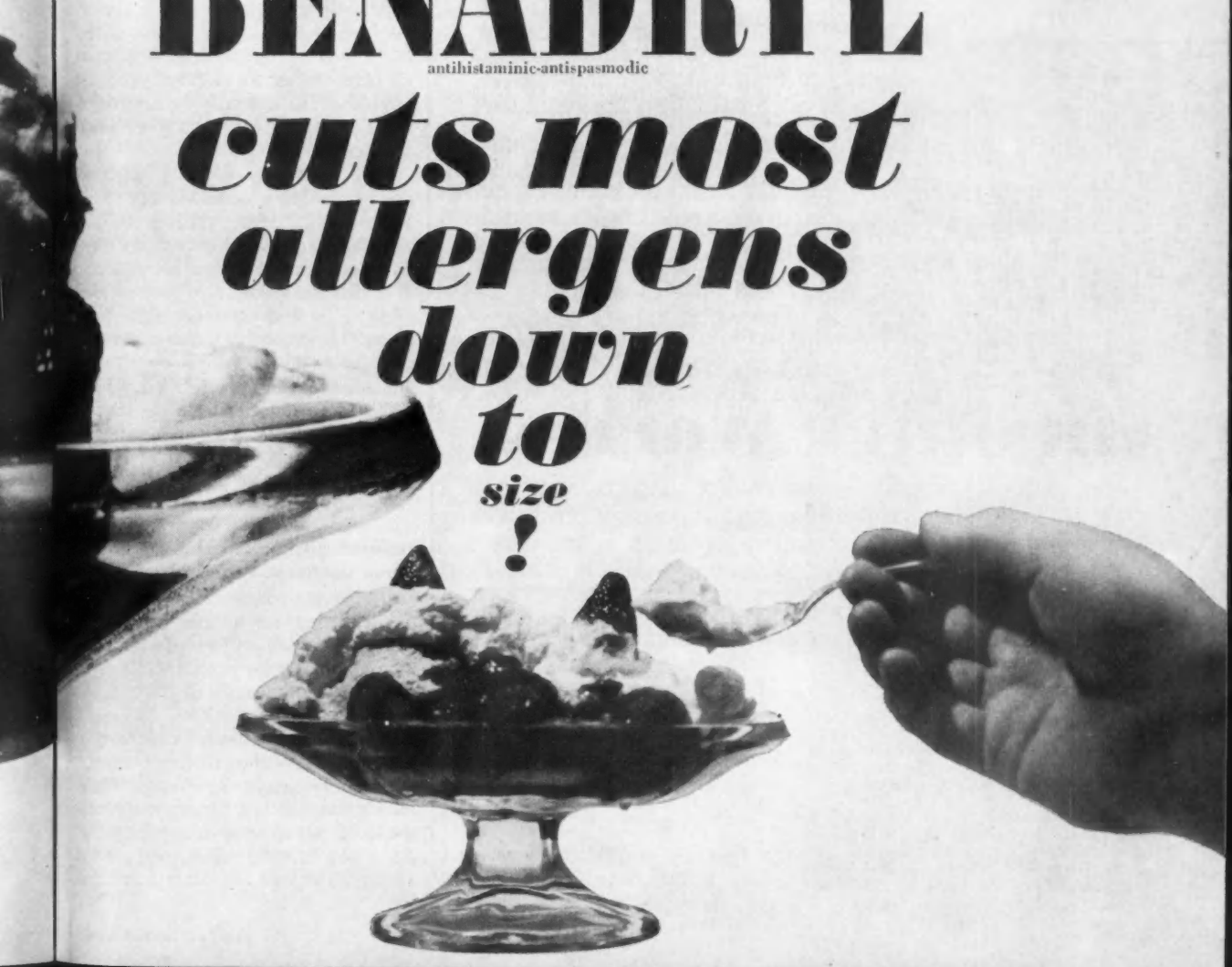
PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan

BENADRYL®

antihistaminic-antispasmodic

cuts most allergens down to size!



Editor's Choice

CONTRAST MEDIA MAY BE HAZARD AS WELL AS HELP

While contrast media undeniably help clarify the roentgenographic picture, some of these chemicals may be complicating the physiologic scene. Recent studies on dogs show that glomerular filtration rate, renal plasma flow and tubular secretion can be adversely affected — sometimes to the extent of complete renal failure.

The kidney tends to lose its ability to conserve sodium. With one of the contrast media studied, renal excretion of vital sodium ion rose 16-40 times. Histologically, the tubules may become abnormal, with patchy, swollen cells. The destroyed tubular cells may then be replaced with fibrous tissue and the number of glomeruli increases. Functional recovery after such chemical insult is unpredictable and often incomplete. *Stokes and Bernard; Ann. Surg., Feb. 1961, pp. 229-309.*

The underlying causes of constipation are generally conceded to be atony of the bowel, biliary stasis, and the loss of excessive amounts of water from the stool.

Bile salts, the natural body laxative, increases the flow of hepatic bile, improving emulsification of fats and absorption of fat soluble vitamins.

A balanced combination of digestant, choleretic and stimulaxant ingredients can help to restore the normal pattern of elimination gently and physiologically.

The hydrotropic action insures the formation and passage of normal stools.

Stimulant laxatives effectively increase the muscular activity of the colon and promote return to regularity.

in other words..

Caroid and Bile Salts Tablets correct constipation physiologically by aiding protein digestion, increasing the flow of bile into the gut, and stimulating peristalsis. ℞ two tablets two hours after breakfast and at bedtime.

Caroid® & Bile Salts Tablets -digestant-choleretic-laxative.
American Ferment Division, Breon Laboratories Inc., New York 18, N.Y.

LUNG CANCER TYPED BY SPUTUM AND BRONCHIAL ASPIRATES

Typing of carcinoma cells in sputum or bronchial washings is not as unreliable as previously believed. Revised histologic classification of bronchogenic cancer types has sharpened diagnostic accuracy. With 68 specimens, an accuracy of 100 per cent was scored on undifferentiated types, while the range was 92-93 per cent accurate with squamous cell or poorly differentiated types. Most frequently mislabeled were adenocarcinomas which yielded a score of only 44 per cent. *Umiker; AMA Arch. Path., Feb. 1961, pp. 23-31.*

MEDICINE AND THE PHYSICIAN CARICATURED IN ART

To understand the nature of the caricature, one must understand the nature of the comic and laughter. Each is a necessary ingredient of the other. But the caricature is more than an art form in the hands of the interpretive artist; it may be an instrument of attack or it may enhance prestige.

The physician and the medical profession have come in for their share of caricaturing throughout history. The positive role which the physician plays in the lives of his patients, in health and sickness, in sadness and despair, in birth and death, is portrayed in various art forms. In the caricature, however, the physician's humaneness and vulnerability, his ineptness and fallacies, and his apparent preoccupation with financial gain may be revealingly expressed. *Nathan, Hirsh and Bingol; Postgrad. Med., Feb. 1961, pp. 214-18.*

CHRONIC INFECTION IMPROVES AFTER REGIONAL PERFUSION

Regional perfusion offers a method of delivering an antibiotic in high concentration to a diseased extremity with minimal risk of systemic toxicity. Chronic osteomyelitis of two to 50 years' duration — which withstood standard treatment because of resistant bacteria — showed improvement when antibiotics were perfused. While the longest follow-up is only two years, the technique appears to be promising. *Ryan et al.; AMA Arch. Surg., Feb. 1961, pp. 128-33.*

Names in the News

POSTS AND AWARDS

Dr. Daniel J. Leithauser, surgeon of Grosse Point Farms, Mich., received the 1961 Distinguished Service Award of the Clinical Congress of Abdominal Surgeons at its meeting in Miami Beach. He is noted for his theory of early ambulation following surgery, making it his practice to get every appendectomized (not ruptured) patient out of bed and walking the day after operation.

Dr. Donald R. McRae of Montreal, elected president of the Canadian Association of Radiologists. Dr. McRae is chief of radiology at the Montreal Neurological Institute and associate professor of medicine at McGill University School of Medicine.



Dr. Frank E. Stinchfield, director of orthopedic service at Columbia-Presbyterian Medical Center and professor and chairman of the department of orthopedic surgery at the College of Physicians and Surgeons, Columbia University, named president-elect of the American Academy of Orthopaedic Surgeons.

Dr. Roger D. Baker, professor of pathology at the Duke University Medical Center and chief of laboratory service at the Veterans Administration Hospital in Durham, N. C., chosen to head the American Board of Pathology.

Sam, a four-year-old pointer, living for the last seven months without one of the valves of his heart (it was removed and another valve from elsewhere in his heart was put in its place) was awarded a silver collar as the Research Dog Hero of 1960 by the National Society for Medical Research.



Dr. Frank M. Woolsey, Jr., division director and associate dean of the Albany (N.Y.) Medical College of Union University, named professor and chairman of the newly-established department of postgraduate medicine by Dean Harold C. Wiggins.

OBITUARIES

Dr. Karl E. Paschkis, 64, professor of physiology and clinical professor of medicine at the Jefferson Medical College, Philadelphia; he was well-known for his research in cancer; of lung cancer; Jan. 27, in Philadelphia.

Dr. Richard Sherwood, Buffalo physician and a medical examiner for the Civil Aeronautics Administration; Jan. 27, in Niagara Falls, N. Y.

Rear Admiral Frederick Flower, 67, USN, retired, holder of the Legion of Merit for his work as a medical officer in the Pelelieu campaign in the Pacific during World War II; of cancer; Jan. 27, in Oakland, Calif.

Dr. Robert P. Glover, 47, internationally famous surgeon and founder of the Cardiovascular Research Foundation and the Glover Clinic for Thoracic and Cardiovascular Diseases in Philadelphia; he helped perfect the operation opening constricted rheumatic fever-scarred valves as well as a technique for diverting blood from another part of the body into the heart (MWN, May 20) to eliminate coronary thrombosis effects; of cancer; Feb. 1, in Cynwyd, Pa.



Dr. S. Rudolph Light, 84, onetime vice president of The Upjohn Company, mayor of Kalamazoo, Mich., and close friend of Wilbur and Orville Wright; Jan. 27, in Kalamazoo.

Dr. Arthur L. Walters, 77, trustee of the Pratt Clinic-New England Center Hospital, Boston, and the Bingham Associates Fund, Bethel, Me.; on the staff of Eli Lilly and Company during the 1920's, he was active in the introduction of insulin and in 1924 he helped establish St. Francis Hospital in Miami Beach, becoming its first physician-in-chief; Feb. 2, in Miami Beach.

Dr. Carroll R. Mullen, 60, professor of ophthalmology and head of the department of ophthalmology at Jefferson Medical College, Philadelphia; he was also attending ophthalmologist-in-chief at Jefferson Hospital and a charter staff member of the Fitzgerald-Mercy Hospital; of acute leukemia; Feb. 1, in Philadelphia.

ADVERTISER INDEX

PAGE

AMERICAN FERMENT DIVISION, BREON LABORATORIES INC.
Caroid & Bile Salts Tablets....46

BRISTOL LABORATORIES
Saluron 8
Salutensin 9
Tetrex 32

BURROUGHS WELLCOME & CO.
Empirin Compound 14

CIBA PHARMACEUTICAL PRODUCTS INC.
Doriden 10

DORSEY LABORATORIES
Trisulfaminic 2
Tussagesic 22

LEDERLE LABORATORIES 41

ELI LILLY AND COMPANY
Darvon Compound.... 24-26, 29, 31, 33, 35, 37

MERCK SHARP & DOHME
Aqua Mephyton.... 38-39

MINNESOTA MINING AND MANUFACTURING CO.
Surgical Tape #530.... 1

PARKE, DAVIS & COMPANY
Benadryl 44-45

ROCHE LABORATORIES
Librium .... cover 4

J. B. ROERIG & COMPANY
Maxipen-Tao 12-13

SCHERING CORPORATION
Coriforte .... cover 3

G. D. SEARLE & CO.
Aldactazide 21

E. R. SQUIBB & SONS
Rautrax-N 4-5

WALLACE LABORATORIES
Deprol 42
Miluretic .... cover 2

WARNER-CHILCOTT LABORATORIES
Thyroid Proloid.... 6

ACKNOWLEDGMENTS: Cover American Cancer Society; 16 HEW (1); 18 Ted Polumbaum; 27 Centre National de la Recherche Scientifique; 28 RCA (2), Drs. Nylen & Scott (1); 29 Dr. Hartroft (1), NIH (1), Drs. Nylen & Scott (1); 33, 34 Mottke Weissman; 35 Carl Perutz; 47 Joe Michaud (1), Ted Russell (1)

PHILANTHROPY WITH INTELLIGENCE



Morris Fishbein, M.D.

In the 1960 annual report of the Ford Foundation, President Dr. Henry T. Heald reviews the Foundation's activities over the last ten years. Among his many admirable comments appears one of the best statements I have ever read as to the need for private philanthropy as distinguished from the tremendous funds provided by government. Dr. Heald says:

Human needs are today served by government to an extent never imagined at the dawn of the American republic. Regardless of varying political philosophies, there is nearly universal agreement on the new role of government in certain functions of human welfare. This unanimity stems not from a preference for public over private effort but from the nature of modern society. Only government can marshal the resources needed to cope with certain complex and costly functions of society.

Far from implying a forfeit of private responsibilities, government expansion poses special challenges to individual initiative and ingenuity. While not entirely precluded from boldness and imagination, responsible government in a democratic society cannot habitually experiment and venture beyond public sentiment.

Thus, it is ever more the responsibility of individuals and institutions outside government to serve as the crucible in which new approaches are identified, and promising ideas tested. It is as such crucibles that national philanthropic foundations — and a number of resourceful local and regional philanthropies—serve American society.

I am especially impressed by the statement that "responsible government in a democratic society cannot habitually experiment and venture beyond public sentiment." The outstanding example of such experimentation was the manner in which The National Foundation produced the vaccine now available for the prevention of polio.

A further excellent statement describes the responsibilities which foundations have toward society.

Society accords foundations the freedom to make private decisions without submitting to a continuous popular referendum on their actions. In return, society properly expects foundations not only to disclose their activities and act in the public interest but also to use freedom and flexibility uniquely to advance human welfare.

This is the definite challenge that confronts the boards of directors and the advisory committees of all foundations. Unless their gifts and grants encourage progress, discovery and invention, they fail in their usefulness.

Private and Federal Funds

The available information indicates that our Federal Government is now about to vote sums of money far beyond anything ever previously given for the advancement of medical education. These gifts will not, however, substitute wholly for the funds coming from private philanthropy and from foundations. All government funds carry with them certain definite obligations which in themselves inhibit extraordinary experimentation.

In conclusion, Dr. Heald's definition of the function of philanthropies is so succinct, and at the same time so profound, that it should be emblazoned on an appropriate display and stand constantly before the executives of all organizations concerned with philanthropy and the public welfare:

Philanthropy is an act of trust. It involves three parties—the giver, the receiver and the public. The giver trusts the integrity and purpose of the receiver. The receiver, in turn, trusts the giver's obligation to respect his independence. And lastly, the public trusts that this transaction is motivated solely by the desire to serve the common welfare.

Morris Fishbein

